

**INFORMED BY SCIENCE  
INVOLVED BY CHRIST**



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# **INFORMED BY SCIENCE INVOLVED BY CHRIST**

**How science can update, enrich  
and empower the Christian faith**

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**Klaus Nürnberger**

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# Preface

There are countless Christians whose faith is being threatened by the formidable and inescapable challenges posed by modern science. These challenges relate to the pre-scientific world view assumptions in which the Christian faith has been packaged for close on two millennia, rather than to the content of the message itself. Sticking to assumptions that are no longer tenable can only undermine our integrity and the credibility of our message.

There is only one way out of this impasse: Take the valid insights of modern science on board. Do so critically but fearlessly. Science is not an enemy of God, but a gift of God for us to appreciate the profundity and glory of God's *creative power* in action. Unpacking the biblical message of God's *benevolent intentions* and repackaging it in contemporary patterns of thought can restore the relevance, the impact and the joy of our faith.

There are countless others who have already given up on the Christian faith as an ill-informed, superstitious and misleading relic of the ancient past. For the more consistent among them, there is only one source of information, science, only one source of empowerment, technology, only one authority, their own aspirations, only one source of motivation, their social and material advancement.

To them, my message is: The modern mindset has indeed led us to achievements beyond the wildest imagination of our ancestors and may continue to do so. But it has also deprived our lives and our life-worlds of a sustainable grounding and orientation. We have lost a sense of the whole of humanity, the whole of creation, the whole of history and our own minute but indispensable role within this whole.

The Christian faith offers us the sense of an all-encompassing embrace, a dynamic vision of comprehensive well-being, a keen concern for any deficiency in well-being in any dimension of life, and the invitation to participate in a vibrant redemptive project. It offers us not personal status and material satisfaction, but authenticity, contentment and responsibility for the whole. That is the God of Jesus Christ in whom we believe!

At a time when the proliferation of the human race, the exponential growth of material expectations and the breakdown of traditional obligations and constraints are leading humanity to the brink of an economic and ecological disaster, there is nothing that could be of greater gravity and urgency than that. We have been called by Christ, not to accept a debilitating, superstitious and outdated world view, but to join a dynamic movement towards a more wholesome future.

## **Recent books by Klaus Nürnberger**

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*Die Bybel—verantwoordelik lees is krities lees* (2009).

*Richard Dawkins' God Delusion: A Repentant Refutation* (2010).

*Regaining Sanity for the Earth: Why Science Needs Best Faith to Be Responsible, Why Faith Needs Best Science to Be Credible* (2011).

# The gist of the argument

‘God’ is our name for the transcendent Source and Destiny of the reality we experience and the sciences explore. Science and faith are two ways of dealing with this reality that are both indispensable and complementary.

To master the looming economic-ecological crises of today, we need both the detailed knowledge of the world provided by science and the commitment to the well-being of this world implied in the Christian faith.

For science and faith to dovetail, faith must clean up its assumptions in the light of the scientific method, while science must avoid a naturalistic metaphysic for which empirical reality is all there is.

Arguing from a Christian perspective, the book distinguishes between ‘reality’ as explored by the sciences and ‘truth’ as proclaimed and believed by the Christian faith. This juxtaposition is then applied to major assertions of the Christian faith:

1. The ‘reality’ of the biblical tradition as explored by historical-critical research and the ‘truth’ of the message that crystallised out over a millennium of biblical history.
2. The neurological and developmental ‘reality’ of faith and the existential ‘truth’ that persuades and motivates believers.
3. The ‘real’ God, whose creative power is experienced by all humans and explored by the sciences, and the ‘true’ God, whose benevolent intentionality is proclaimed and believed on the basis of the biblical tradition.
4. The ‘real’ human being as a biological, spiritual and social creature and the ‘true’ human being who shares the creative and redemptive intentionality of God.
5. The ‘reality’ of Jesus as a historical human being and the ‘truth’ of the elevated Christ as the authentic representative of God, in whose new life we are invited to participate.
6. The ‘reality’ of the end of life and the universe, as predicted by science, and the ‘truth’ of God’s vision of comprehensive optimal well-being that provides us with meaning and direction.

The book encourages Christians to take the insights of modern science on board—critically, but wholeheartedly—as God’s way of displaying the profundity, greatness and glory of God’s creation before us and as an instrument to master the economic-ecological impasses humanity is facing today.



# 1

## Science and faith as gifts of God

### Reader reflection

The issue in this chapter is the relation between modern science and the Christian faith.

If you had to choose between science and faith, which one would you prefer and why?

Can you give examples where science seems to contradict (or confirm) traditional assumptions of the Christian faith?

Would their faith collapse if believers bought into current scientific assumptions?

### What this book is all about

When writing this book, I wanted to make my research on the relation between modern science and the Christian faith accessible to a wider spectrum of readers of all persuasions.<sup>1</sup>

However, in this volume I also changed my focus. I do not deal with science-faith relationships in general, but address Christians very specifically, encouraging them to take modern science on board.

Christians who are informed by modern science could be the most deeply persuaded and the most strongly committed believers in Christ and, therefore, the most eager participants in God's creative and redemptive project in the world.

The reason is simple: Scientists penetrate the awe-inspiring majesties and mysteries of reality more deeply than the rest of their contemporaries—and this reality is, Christians believe, the product of God's creative power.

They are also able to fathom most profoundly the dire consequences that humanity will have to face if we continue with the insatiable pursuit of self-interest, rather than sharing God's redemptive concern for God's creation.

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<sup>1</sup> That is why I draw quite heavily on material taken from my previous work on the subject, especially Klaus Nürnberger 2011. *Regaining Sanity for the Earth—Why Science Needs Best Faith to be Responsible, why Faith Needs Best Science to be Credible*. London: Xlibris Corporation / Pietermaritzburg: Cluster Publications. For other sources see my webpage [www.klaus-nurnberger.com](http://www.klaus-nurnberger.com).

## **Is that entirely unthinkable?**

Scientists are abandoning the Christian faith in droves. This cannot possibly leave Christians unconcerned. They believe in a God who desires the comprehensive well-being of God's creation, while we are well on our way to an unprecedented economic and ecological catastrophe.

The modern economy has unleashed a wave of selfishness and indulgence across the world population that has become dangerous for our survival. Science and technology have provided humans with unheard powers without generating a concomitant sense of responsibility; faith has indulged in a private spirituality without concern for the 'evil world' out there.

Science has lost its transcendent foundations; faith has lost its credibility. Believers dare not break out of their spiritual preoccupations and pre-scientific world views; scientists do not dare to be associated with a faith that has lost its plausibility and respectability in terms of modern insights.

All this is most regrettable. It is also unnecessary. In earlier times, science and faith dovetailed as two dimensions of a common culture. There is no reason why this cannot happen again. Having drifted apart for centuries, science and faith must again find each other and lead humanity out of the approaching crisis.

## **Section I Science and faith**

In this book, I encourage believers in Christ to take modern scientific insights on board—critically but wholeheartedly. I do not insist on the inerrancy of the biblical Scriptures. I do not try to rescue outdated doctrinal assumptions. I do not ward off the challenges of modern science.

I argue, instead, that science is God's way of displaying the profundity, greatness and glory of God's creation before us. It is also the most potent instrument for God's redeeming action in the world. Without science, the current economic and ecological crises cannot be resolved. Christians must accept science as a gift of God and a tool of God to cope with an accelerating and increasingly dangerous process.

This is not a one-way street. Just as science can update, enrich and empower the Christian faith, the Christian faith can provide meaning, criteria of acceptability and the vision of comprehensive optimal well-being to the scientific enterprise. Scientists are human beings rather than mechanical gadgets. They need assurance and direction as much as any other human being in this world.

Endowed with so much knowledge, the responsibility placed on the shoulders of scientists is so much greater than in previous centuries. I am convinced that the Christian faith has the potential to provide them with grounding, a vision and a motivation that can base their professions on a new foundation.

## 1. Do we dare rethink our inherited certainties?

The relation between science and faith has profound emotional undertones. It touches the very foundations of human life. That is why people get nervous, even aggressive, when you challenge their convictions. Art can be playful, creative, without having to claim that its products are true or significant. Faith is dead serious. Science is dead serious.

Science questions outdated assumptions of the Christian tradition most profoundly. When your foundations are shaking, you begin to panic. When you are threatened, the ‘fight or flight’ syndrome sets in. You try to discredit science as godless, unfounded, or unproven. Or you withdraw from science into the safety of your inherited certainties.

This is most unfortunate. It jeopardises our mission in this world. It robs Christian believers of their integrity and the credibility of their message. It also deprives them of the exhilarating experience of observing the power, mystery, beauty, riches and complexity of God’s creation as revealed by science.

It is important that these subconscious sentiments be brought to the surface, articulated, critically assessed, and worked through. For this reason, I try to engage the thinking of my readers. In each section, readers are prompted to reflect on their own assumptions, then consider my proposal, then come to their own conclusions.

## 2. The message and its packaging

The second problem is that many scientists and believers cannot distinguish between the priceless meaning of the biblical message and its packaging in ancient world views. They assume that the pre-scientific world views found in the Bible are part of the intended message.

Assuming that whatever is found in the Bible is a revelation of God’s eternal truth, many believers feel obliged to defend the biblical narratives. Many naturalists are baffled when they observe the tenacity with which even modern Christians tend to cling to demonstrably obsolete assumptions.

Why not grasp the breathtaking insights of the sciences with both hands and praise God for them? Carl Sagan, not exactly a friend of religious faith, hit the nail on the head when he wrote:

How is it that hardly any major religion has looked at science and concluded, ‘This is better than we thought! The universe is much bigger than our prophets said, grander, more subtle, more elegant’? . . . A religion, old or new, that stressed the magnificence of the Universe as revealed by modern science might be able to draw forth reserves of reverence and awe hardly tapped by the conventional faiths.<sup>2</sup>

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<sup>2</sup> Carl Sagan, quoted in Richard Dawkins, *The God Delusion*. London: Bantam Press, 2006, p. 12.

Well, exactly! To see God at work through the lenses of science should be one of the most delightful preoccupations of any believer—and it is all there for the taking! Conversely, exposed to the wonders of creation and the dangers it faces, scientists could be the most enthusiastic and committed believers.

### 3. The reality of God's creative activity

We must begin to realise that reality will not adapt to the concept of creation we inherited from a distant past, let alone our wishful thinking about the Creator. Our concept of creation must adapt to the reality that God has, in fact, created and continues to create, which is the reality that the sciences are disclosing to us.

How did the universe come about? How does it function? Where is it going? These are the questions of *science*, not the questions of faith. There is nothing in the biblical faith that prevents us from taking science on board. Faith has always assumed that God's creative activity can be known from observing the reality that God has created and continues to create.

Beautiful texts in the Bible show how ancient believers marvelled at the 'wonders of creation'. They did so while observing the intricate functioning of the actual world out there, rather than some product of fantasy or speculation. Just look at Psalm 104 as an example! Similarly, Job said, after he was shown the wonders of creation, 'I had heard of you with my ear, but now my eye has seen you' (Job 42:5).

What had Job seen of God? Certainly not God 'himself'! But he saw the product of God's creative activity! Significantly, Job repented when confronted with the creative *power* of God, while he did not repent when his friends confronted him with the *law* of God. It is through the realisation that we are derived, dependent, vulnerable, mortal, accountable and culpable beings that we are struck by God's majesty.

Paul says: 'Ever since the creation of the world, God's eternal power and divine nature, invisible as they are, have been understood and seen through the things he has made' (Rom. 1:20). God's greatness is accessible to all, he says, so they have no excuse.

### 4. Science as a divine gift and instrument

In pre-modern times, scientific observation and religious commitment formed an integrated whole.<sup>3</sup> Throughout the ages, sages wondered how the world actually came into being and how it functioned. They watched the universe, as far as it was accessible to unsupported human observation, and came to their different conclusions.

But this rudimentary science was part of their religious concern for authenticity. They utilised the world views prevalent during their times as packaging for their pronouncements about meaning, purpose and vision. Certainly, ancient scholars were no fools. Restricted by the tools of observation and calculation available in their times, however, the best they could come up with was a series of intelligent guesses.

<sup>3</sup> Suggested reading: Peter Barrett, *Science and Theology since Copernicus: The Search for Understanding*. Pretoria: University of South Africa, 2000.

All this has changed. We live in extraordinary times, exciting times, dangerous times. We live in the age of science. Of course, it can be argued that science is still replete with hypotheses, that is, intelligent guesses. We are indeed still on our way and will be on our way forever.

But our tools of observation and explanation have become immensely more refined, precise and accountable—both with regard to the natural world and the nature of ancient documents such as those found in the Bible. We know more about the origins and the operation of reality than our philosophical and religious ancestors could ever hope to know. We also know more of the character and the communication of meaning than our predecessors did.

The method of science is based on evidence, mathematical stringency and plausible conjecture. It seeks to observe, explain and predict. It has proved to be immensely successful in doing so. It is intrinsically critical. It is not impressed by appearances, spurious claims, or baseless suspicions. It goes to the roots of the matter. It dismantles unwarranted assumptions, premature conclusions and superstitious hopes and fears. It transforms the way humans experience, interpret and deal with reality. Is all that wrong? Is it evil?

From the perspective of faith, that cannot be true. Science has opened our eyes to the infinite scope and depth of God's creation. It has the singular capacity of updating, enriching and empowering faith for its task in the current situation. This is a wonderful gift of God, not a curse.

What we have lost, however, is the integration of knowledge and commitment. The certainties of faith have not kept pace with the explosion of scientific information. This 'cultural lag' must be remedied—boldly and urgently!

## **Theology cannot do better**

Science has become the authority in which countless modern people place their trust. Today, science fulfils one of the roles that philosophy and religion played in pre-scientific cultures, namely that of making sense of how reality originated, evolved and continues to function.

Faith and theology do not have to duplicate that pursuit. Theology does not have the mandate, the method and the competence to do so. It has to fall back on science for its knowledge of reality. Of course, scientific theories are always provisional, partial and perspectival. But that is not the point. The creation narratives found in religions were also tentative, situational and variable.

The point is that faith cannot challenge science on its home ground. Problematic scientific theory must be challenged on *scientific* grounds. Science must be challenged by faith only when it poses as an alternative to faith, claiming to provide ultimate meaning, criteria of acceptability and authority.

The story of the world that science has unfolded before our eyes is more precise, detailed, glorious and exciting than what all the pre-scientific religions were ever able to imagine. Science offers us the best explanations available at present and theology has no better.

Contemporary believers just do not know how privileged and blessed they are! They live in the age of science. They have information not available to their forebears. To oppose scientific insight on religious grounds is folly.

## Section II

### Faith and science—two complementary pursuits

Do faith and science compete with each other? Do they exclude each other? Can we dispense with either faith or science? By no means! Science and faith complement each other! We need both information and commitment—and we need them badly!

Science provides knowledge; faith provides meaning. Science is about understanding what *has* become; faith is about commitment to what *ought* to become. Science explores immanent reality; faith intuits the transcendent foundations of that same reality. Science is about observation, explanation and prediction; faith is about meaning, acceptability and vision. Science produces reliable (or unreliable) information of the world process; faith produces true (or misleading) intuitions of its meaning and purpose.

Faith does not have the resources to deal with the exploration of reality. Science does not have the resources to provide spiritual foundations and ethical orientations. Faith must stop behaving as if it could offer a valid alternative to science; science must refrain from operating as if it were an alternative to faith. Science uncovers the spectrum of potentials available at any point in time and space. Faith motivates us to select and activate the most beneficial and wholesome potentials at such a point in time and space.

Science must concede that the exploration of a world void of meaning is a meaningless exercise. Faith must concede that it must operate within the world explored by science or it lives in the world of fantasy. Faith is not bound to a superstitious world view; science is not bound to an atheist creed.

‘Best science’ consists of the best theories about reality available at present. As such, it can update, enrich and empower the world view of faith. ‘Best faith’ is capable of providing human life, including that of the scientist, with grounding, direction and motivation.

Science and faith are indispensable human pursuits. Humans need both knowledge and commitment, both factuality and inspiration. The tasks of science and faith dovetail. If they stick to their respective mandates and methods, they do not exclude, but complement each other.

#### 1. The integration of science and faith is prudent

Christians have every reason to take science seriously, both as a God-given corrective and an indispensable partner. If their assumptions are outdated or irrational, they are not likely to become joyful witnesses to their faith, impress their secularised contemporaries, and make a meaningful contribution to the future of humanity.

They are more likely to hide their faith and sheepishly move around in the modern world as believers. If faith has become a private preoccupation, not taken

seriously by the rest of humanity, if it retreats into a private niche because it is ashamed of its assumptions and attachments, it has lost its comprehensive vision, its redemptive rationale and its persuasive power.

Nothing can undermine our witness and our mission more profoundly than a number of demonstrably false assumptions about the world in which we live. If undeniable scientific findings cannot be integrated in the world view of faith, this faith becomes suspect.

## 2. The integration of science and faith is essential

For most of us, whether believers or scientists, a fundamental change of perceptions, lifestyles, values and aspirations for the sake of a more wholesome future is too costly. But we simply can no longer do without it.

While they cater for two different dimensions of human existence, science and faith have a common rationale. They are meant to *serve humankind*, situated as it is within its entire social and natural network of relationships. This has become imperative in view of the impending economic-ecological crisis that I will briefly sketch in the next chapter.

Science and faith are not meant to become mercenary pursuits, operating on behalf of collective interests and personal desires, whether material or spiritual, at the expense of other such interests and the needs of the natural world. At least in the perspective of the Christian faith, science and faith are meant to *serve* a common vision and be *accountable* to a common ultimate authority.

While science can help faith to replace an obsolete view of reality, faith can help science to abandon purposes and pursuits that are in conflict with a wholesome future. Science must be grounded in a system of meaning, geared to criteria of acceptability and guided by a vision of comprehensive optimal well-being; otherwise it can easily be used as a tool for unscrupulous agents to achieve their wayward goals.

There are countless examples of a mercenary science, such as the development of nuclear, biological and chemical weapons, the development of lethal gas for Nazi death camps, detrimental drugs such as *Contergan* (Thalidomid), pest controls such as DDT, spreading scientific myths to bolster the sale of dubious products, playing down the detrimental effects of smoking and drug abuse, and scientific denials of global warming.

Many industries run large research and development projects that are unlikely critics of the detrimental effects of their products for downstream and end users, society and future generations. They need the scrutiny of an independent and incorruptible moral agent to remain on track.

Scientists—and state funding agencies—also have to reflect on what the priorities of the human enterprise should be. Can the horrendous sums ploughed into finding traces of water on Mars or establishing whether the Higgs Boson exists or not really be justified while there are millions of people who do not have access to safe drinking water and basic medical care?

I do not even want to mention the unbelievable wastage that is caused by the development and deployment of sophisticated armaments! What is the meaning of ‘national security’ if its cost is the destruction of large parts of other societies, their material and cultural assets, and the devastation of our earth?

### 3. The integration of science and faith is legitimate

The integration of best science with best faith is not only essential, but also *legitimate* from a theological point of view. The Christian faith is a *redemptive* faith. It is based on the message of God's *benevolent intentions*. It is meant to *serve* humanity and the world in which it is embedded. Its rationale is to offer humans *authentic life* in fellowship with God, the transcendent Source and Destiny of reality as a whole, and *peace* with its social and natural environment.

For believers who read the Bible from a historical perspective, there should be nothing strange about that. Its message emerged and evolved in ancient times as a series of dynamic redemptive responses to changing human needs and predicaments, culminating in the Christ event.

According to the biblical witness, the 'Word of God' entered human history, picked up people where they were—in their particular world views, their unfulfilled needs, and their problematic motivations—and led them a few steps towards God's vision of comprehensive well-being.

This happened again and again over more than a millennium of ancient Israelite history. It implied radical changes prompted by radical transitions. The crisis the biblical faith is facing today is hardly more dramatic than the crises that the Israelite-Jewish-Christian faith had to face at particular junctures of its history. Here are a few examples:

Abraham was told to leave his clan, his home country and his religion and trek into the unknown under the guidance of Yahweh. When David placed the institution of a king on firm foundations, the tribal elders lost much of their power. When Solomon built the national sanctuary in Jerusalem, earlier sanctuaries (Shechem, Bethel, Gilgal, Shilo) lost their significance.

The political split of Israel into the northern and the southern kingdoms led to two separate religious traditions. The northern tradition focused on the exodus, the conquest of Canaan and the Sinaitic Covenant. The southern tradition focused on Jerusalem, the Davidic king and the temple. The northern version was all but eradicated by the conquest of the Assyrians in 721 BC. That constituted an immense crisis of ancient certainties! What about the promised land? What about the covenant between Yahweh and Israel?

When King Josiah tried to unite the two territories and re-establish the Davidic Empire, he based his reforms on the Deuteronomic message that was centred on the Covenant. But he demolished all local cults, killed the priests in the north and concentrated the entire southern priesthood in Jerusalem. Again, this was a formidable transformation that caused great suffering and disorientation.

A particularly severe crisis arose when the Babylonians captured and destroyed Jerusalem in 586 BC. None of the old Israelite certainties were left intact. The privileged position of Israel among the nations was gone. Yahweh, the Israelite God, seemed to have proved inferior to Marduk, the god of Babylon. The liberation from Egyptian slavery made way for Babylonian enslavement.

The Promised Land was lost. The Covenant seemed to be invalidated. Israelite law was replaced with Babylonian law. The temple of Yahweh was destroyed. Sacrifices were no longer possible. Zion, the 'holy mountain', had become an ordinary hillock. Some prophetic voices argued that due to Israel's sin, Yahweh had rejected his people.

The Davidic king was deposed and humiliated. Nebuchadnezzar, a pagan emperor, took his place as an instrument of Yahweh. Equally incredible was the message of Deutero-Isaiah

(Isa. 40-55): Yahweh would use Cyrus, the Persian emperor, also a pagan, to redeem Israel: ‘I make you hear new things, hidden things you have not known’ (Isa. 48:6).

Something similar happened when Jesus proclaimed and enacted the unconditionally redemptive motivations of God. Traditional preconditions—such as belonging to the elect people of Israel, strict observance of the Mosaic law, ritual purity, elaborate sacrifices—fell away. What mattered was accepting being accepted and transformed in the fellowship of God. In time, masses of ‘Gentiles’ flocked into the fold on the strength of this new openness, seriously undermining the Jewish sense of being the elect people of God.

But before that happened, there was another ground-shaking crisis: Jesus, who was perceived by his disciples to be the Messiah that the Jews had expected for centuries, was condemned by the leaders of his own faith community as a heretic and impostor and executed by the Roman authorities as an insurgent.

Soon enough, another crisis ensued. Though believed to have risen from the dead, Christ did not return in glory as expected by his followers. Faith in Christ had to be reconceptualised in response to these developments or face an untimely collapse. We shall come back to that in chapter 9.

Moreover, during more than a millennium of ancient history, the evolving biblical faith encountered Canaanite, Egyptian, Assyrian, Babylonian, Persian, Hellenistic and Roman motives and concerns. It critically integrated whatever seemed to make sense at the time.

Solomon’s temple was built by Canaanite artisans. The ‘Covenant’ described in Deuteronomy seems to have been modelled on Assyrian political contracts. At least in certain aspects, the creation narrative in Genesis 1 seems to have been a Jewish response to the Babylonian myth of creation, the *Enuma elish*.

The apocalyptic distinction between current history and the age to come echoes the Persian proclamation of a cataclysmic end to the struggle between good and evil. During the Hellenistic empires, the Platonic dualism between spirit and matter impacted Jewish and Christian thought.

The process continued after the closure of the biblical canon. The classical Trinitarian and Christological doctrines reconceptualised the Christian message in terms of the Hellenistic approach to reality. Catholic Christianity adopted Roman legal and institutional frameworks.

The theology of the Reformation was a response to the impasses created by a Catholic tradition that had lost its way. Pietism was a response to the formalism of doctrinal orthodoxy, while it integrated the subjectivity and individualism of the Enlightenment. Liberation theology was a response to the agonies of the oppressed and marginalised.

In Christ, God became a Jew to the Jews to win over Jews. If we are to become participants and carriers of the ‘good news’, Paul says, we must become ‘Jews to the Jews’ and ‘all things to all people’ (1 Cor. 9:19-23).

In modern times, becoming ‘all things to all people’ involves becoming scientists to people informed by the modern scientific approach to reality. That is the long and the short of it.

The attempt to integrate best science with best faith is, therefore, not a heretic deviation from the biblical truth, but a direct and essential consequence of its redemptive thrust. We must do for our times what biblical authors, church fathers and reformers did for theirs.

## Section III

### A specific faith

#### 1. Why the Christian faith?

This book does not deal with the relation between science and religion in general. It encourages *Christians* to integrate valid scientific insights into their view of reality. It proposes ways of re-binding the scientific enterprise into an orientation towards God's vision of comprehensive optimal well-being.

There are good reasons for me to concentrate on the Christian faith. I share this faith. As a Christian theologian, I am entrusted with the task of making sense of this faith on behalf of the Christian community. At least in the West, the Christian faith and modern science have a common history. Their assumptions and aspirations are deeply entangled with each other.

The Christian faith endeavours to establish ultimate validity and human authenticity. It deems the Christ event prototypical for what ought to be. It offers God's gift of participation in the 'new life of Christ' in fellowship with God.

It opens up God's vision of comprehensive optimal well-being that translates into a vivid concern for any deficiency in well-being in any dimension of life. It realises that genuine concern is sacrificial and invites us to participate in God's creative and redemptive project.

Other convictions are not meant to be excluded. But I would rather allow them to speak for themselves. To the extent that they have the same rationale, the Christian faith can learn from their insights and share its own insights with them.

In as far as they do not share the same thrust, they may want to benefit from a constructive dialogue or distance themselves from us. However that may be, inter-faith relationships are not part of the agenda of this book.

#### 2. The basic dialectic of the biblical faith

From a faith point of view, we *experience* the *creative power* of God in the world process as explored by the sciences, and we *proclaim* the *benevolent intentionality* of God on the basis of the history of Israel, culminating in the Christ event.

The difference between experience and proclamation is critically important for the relation between science and faith. God's creative and redemptive intentionality is not necessarily apparent in the world we observe and of which we are a part. More often than not, what we proclaim seems to be in conflict with what we experience.

Reality is deeply ambiguous, destructive, sometimes even demonic. Faith will often have to move into protest mode: 'God, this cannot be your will! This is not the way we have come to know you!' Many of the psalms cry out in agony, pitting the God of faith against the God of experienced reality.

I picked up this distinction from Martin Luther's theology. I found it exceptionally helpful in determining the relation between science and faith. According to Luther, experienced reality reveals God's creative power but hides God's benevolent intentions. He speaks of the 'hidden God', where our experiences suggest that God is against us.

In contrast, the cross of Christ, proclaimed as God's sacrificial act on our behalf, hides God's creative power but reveals God's benevolent intentions. Faith is understood as the tenacity with which believers put their trust in God's benevolence in the face of their experience of the contrary. Once they do that, however, they are also able to discern God's benevolence in the ambivalent reality of God's creation.<sup>4</sup>

To me, this juxtaposition provides a pivotal clue for understanding the relation between the immanent mechanisms of God's creation, which the sciences explore, and the transcendent intentionality of God that faith and theology proclaim. I will distinguish, therefore, between the *real* God (God's creative power as manifest in the world process and 'revealed' by science) and the *true* God (God's benevolent intentionality as manifest in Christ and proclaimed by faith).

Correspondingly, I will deal with the *real* human being (as described by the sciences) and the *true* human being (as defined by faith in Christ). The words 'real' and 'true' carry a variety of meanings. Here, they simply indicate the difference between 'empirical experience' as perceived by science and 'ultimate validity' as perceived by faith.

Implied in this distinction is the difference between the *experience* of what *has* become (the field of science) and the *vision* of what *ought* to become (the field of faith). The criterion of what ought to become is God's vision of comprehensive optimal well-being, translating into concern for any deficiency in well-being in any dimension of life. This criterion is derived from the Christian faith, but I am persuaded that it is all-inclusive and universally valid.<sup>5</sup>

It is hard to imagine rational and equitable grounds for opposing this criterion. The elevation of personal or collective power and self-interest to ultimate validity has proved to be horrifyingly destructive in human history, while its opposite, fatalistic acquiescence, has led to stagnation.

On this basis, I try to reconceptualise faith in Christ in response to modern scientific insights. With that, I continue the biblical tradition where the 'Word of God' constantly responds creatively and redemptively to changing human deprivations, needs, predicaments and world views. Conversely, I invite scientists to consider the ultimate meaning offered by a reconceptualised faith.

<sup>4</sup> For detail see Klaus Nürnberger, *Regaining Sanity for the Earth*. Pietermaritzburg: Cluster Publications, 2011, chapter 11.

<sup>5</sup> 'Human beings are God's created co-creators whose purpose is to be the agency, acting in freedom, to birth the future that is most wholesome for the nature that has birthed us . . .' Ph. Hefner, *The Human Factor: Evolution, Culture, and Religion*. Minneapolis: Fortress Press, 1993, p. 264.

### 3. The issue of transcendence

For good reasons, scientists restrict themselves to the exploration of immanent reality. Immanent reality is, at least in principle, accessible to human observation, explanation and prediction. Seen in this light, there is only one reality. It includes everything that exists and happens—waves and quanta, atoms and molecules, cells and organisms, brains and minds, consciousness and social organisations, values and norms. It is all part of nature.

The question of a possible transcendent Source and Destiny of this reality is not part of the mandate and method of the sciences. They leave such questions to philosophers and theologians. But this restriction of the sciences is a *methodological* decision. It does not imply that *there is no* such transcendent Source and Destiny.

Let me briefly unpack these concepts. When I speak of the *Source* of reality, I mean that we did not just pop into existence; that we have not brought ourselves about; that we cannot keep ourselves going. We have come from somewhere; our lives are rooted in something; we owe ourselves to somebody. And this is true for everything that exists and happens within the reality we experience.

When I speak of the *Destiny* of reality, I mean that our lives are not a meaningless accident without sense or purpose. We are heading somewhere; we are meant to become something; we are meant to play an indispensable role; our lives are precious and treasured by somebody. And again, this is true for everything that exists and happens.

When I speak of *transcendence*, I refer to something (or somebody) that is beyond the reality we experience, something that cannot be observed, explained, or even imagined, yet it constitutes our lives and reality as a whole. That is why we have to struggle for an appropriate *concept* of the transcendent. ‘God’ is simply our name for this intuited but inaccessible Beyond, this great Other, this Ultimate Reality.

Naturalism, in contrast, is a specific world view. It believes that the world we know and the sciences explore is all there is. Nature is a self-generated, self-contained, self-sustaining, self-destructive, and (in the case of humans) self-responsible whole. There is no transcendent Source; there is no transcendent Destiny; there is no ultimate purpose, no ultimate meaning. Nature just functions as it does.

In the secularised West, naturalism is the most formidable alternative to the Christian faith. As far as scientific methodologies, theories and findings are concerned, naturalism may be virtually identical with science. This fact constitutes a huge advantage over traditional versions of the Christian faith.

However, the assumption that the reality we experience and the sciences explore is closed in upon itself, rather than open towards a transcendent Source and Destiny, is a metaphysical decision rather than a scientific finding. It goes without saying that the Christian faith is based on a different assumption. While faith can agree with ‘best science’, it cannot agree with naturalism.

## Section IV

### The character of the book

When writing this book, I wanted to make my research on the relation between modern science and the Christian faith *accessible to a wider spectrum of readers* of all persuasions, especially readers who yearn for answers without getting embroiled in professional complexities and technicalities.

Therefore, I tried to offer as lucid, streamlined and simple an argument as possible without becoming simplistic. The main argument is presented in *large* print, while *small* print sections are added for those interested in more detail.

While I utilised the material contained in the previous book quite extensively, I deliberately skipped academic controversies and elaborate references. Footnotes contain a few suggestions for further reading. Less familiar terms are explained in a *glossary* before the index at the end of the book.

To keep the argument simple, I did not enter into theological alternatives, scientific discussions and the intricacies of the science-religion debate. But I did offer substantial amounts of biblical interpretation. The Bible is the book of the Christian community. The biblical tradition emerged and evolved in human history. In terms of the sciences, only a historical-critical reading of the Bible can be considered an accountable and appropriate reading.

In substantive terms, I distinguish between God's creative power experienced in reality and explored by the sciences and God's benevolent intention proclaimed by faith on the basis of the biblical witness. Science provides information, faith spawns commitment. This distinction is then applied consistently to major theological topics.

In spiritual terms, I want to encourage believers to embrace science critically yet wholeheartedly. Taking science on board, faith will shed its obsolete world views and its untenable assumptions. It may become a straightforward, practically engaged commitment to God's vision and mission.

Believers may regain their personal integrity and the credibility of their message. Their faith may reach a deeper grounding, a more pragmatic engagement and a more realistic hope. Their faith commitment may regain the respect of those who have written off the biblical heritage as something obsolete, otherworldly and irrational.

My hope and prayer is that my readers will breathe more freely and more deeply after having engaged with the message of the book, that they come to their own conclusions, and that they end up with a more joyful commitment to God's creative and redemptive project than before.

A brief word about gender: It is easy to avoid sexist language when referring to people. The task is more difficult when it comes to Christ and God. The biblical Scriptures are historical documents. We cannot simply ignore the fact that they were written in a patriarchal social context. Jesus was a male and a Jew, although the risen Christ represents a new humanity accessible to all of humankind.

The concept of a personal God must be gender neutral, but we do not have a gender-neutral concept for an individual person. I do not think we have found a satisfactory solution to this problem. I substituted the noun for the pronoun (e.g. 'God loves God's people').

Where this sounded too awkward (e.g. God reveals God-self), I used the male pronoun, but placed it in inverted commas (God revealed ‘himself’). I hope my feminist readers can live with this compromise.

## Overview

The current chapter has outlined the task. Chapter 2 sketches the context of the relation between science and faith. This context is the precarious direction in which the modern package of assumptions is leading us. In view of the immense dangers humanity is about to encounter, the dialogue between science and faith is not an academic pastime, but an urgent necessity.

Chapter 3 argues that, to convey its message to a populace informed by science, faith must reconceptualise its basic contentions along the lines of an experiential-realist approach, as commonly used in a scientific discourse. It must take the insights of modern science on board rather than stick to the world view assumptions of a bygone age.

Chapter 4 spells out the difference between the approach of naturalism and the Christian faith. Naturalism is built on the assumption that the world we experience is all there is, while the Christian faith intuits the derivation of our world from, and dependence on, a transcendent Source and Destiny of reality as a whole including our own lives.

Chapter 5 shows why we should adopt an experiential approach to the biblical Scriptures, the ‘objective’ sources of the Christian faith. The ‘Word of God’ emerged and evolved in human history as a series of divine responses to human predicaments and depravations, packaged in the world view assumptions prevalent at the time. It is the dynamic thrust of the Word of God that produced the Scriptures and that again wants to speak to us packaged in the world views of our times.

Chapter 6 applies the approach of experiential realism to the ‘subjective’ encounter of believers with God in Christ. As an example, my own faith experience is first described, then analysed in terms of developmental psychology. Faith happens in the brain. How did it get there? Once we understand its actual operation, there is nothing uncanny or superstitious about the Christian faith.

Chapter 7 juxtaposes the way science explores the operation of reality from an immanent perspective and the way faith proclaims a transcendent intentionality that brings this reality about. Here, I distinguish the ‘real God’, whose creative power is manifest in the world we experience, and the ‘true God’, whose benevolent intentionality is proclaimed and believed rather than experienced.

Chapter 8 applies the same dialectic to the human being. It juxtaposes the way the sciences see the ‘real human being’, as a biological and spiritual creature, with the ‘true human being’, as a mature agent meant to envision and attain authentic existence within a wholesome life world as proclaimed by faith.

Chapter 9 uses the insights gained in the previous two chapters for an experiential interpretation of the Christ event, namely the proclamation and enactment of the God of Israel as a God of redeeming love by Jesus of Nazareth and his elevation to

the status of the universal representative of God. These reflections lead to a simple restatement of the Trinitarian doctrine.

Chapter 10 tries to resolve the contradiction between the likely future of the universe, as envisaged by the natural sciences, and a ‘new creation’ without depravity, suffering and death, as proclaimed by apocalyptic theology. This includes the possible meaning of a resurrection from the dead and life after death from an experiential-realist point of view.

### **Reader reaction**

Where do you disagree with my proposal? Can you augment, or improve on my contentions?

How would you explain my stance and your (positive or negative) response to a high school student?

## **Let us summarise**

In this chapter, I argued that the stand-off between modern science and the Christian faith is unfortunate and unnecessary. Humans need both knowledge and commitment. Science and faith are indispensable pursuits that do not exclude, but complement, each other.

To overcome the disjuncture between them, believers must integrate the provisionally valid insights of modern science, and scientists must discern the need of humans for meaning, criteria of acceptability and authority as provided by faith.

The integration of valid scientific insight into the world view of faith is prudent. Clinging to outdated and demonstrably flawed assumptions about reality undermines the integrity of the believers and the credibility of their message.

In view of the great economic and ecological dangers we are facing, it is essential. It is also theologically legitimate, because throughout its history, the biblical faith responded redemptively to changing depravities, needs, predicaments and world views.

I focus on the Christian faith because I share this faith, and because, at least in the West, modern science and the Christian faith have a common history. From a faith perspective, science explores the creative power of God, while faith proclaims the benevolent intention of God.

In contrast with naturalism, faith assumes that the universe is open towards a transcendent Source and Destiny. The book is an attempt to make the entire discourse as accessible to the educated laity as possible.

# 2

## Why does it matter?

### Reader reflection

Science is an integral part of modernity. This chapter is about the development of modernity as the dominant civilisation in the world today.

Can you sketch some typically modern assumptions and values that replaced the traditional assumptions and values of our forebears?

Have these modern assumptions and values had positive, negative, or ambiguous consequences?

### What this chapter is all about

The Christian faith, once the bastion of Western civilisation, is losing its constituency. In secularised Western countries, the great majority of scientists and scientifically informed people have no appreciation of, and no use for, basic Christian faith assumptions any longer.

This must be a cause for grief, concern and introspection for every believer. However, it is not the only reason why a new way to integrate science and faith has become indispensable and urgent. The relation between faith and science must be seen in much wider historical, social and cultural contexts.

Humanity has moved into a precarious phase of its history. Experts have warned for some decades now that we are moving in a dangerous, destructive, possibly suicidal direction. Catastrophe can perhaps still be averted, but there does not seem to be the knowledge, the sense of urgency and the political will to do so.

Five main factors seem to constitute the danger:

- (a) The human population has increased exponentially (faster and faster) over the last few centuries and is expected to grow further before it stabilises.
- (b) Human material expectations are soaring across the board. Ever more people can afford affluent life styles. A spirit of contentment and sufficiency is making way for the insatiable urges of consumerism.

- (c) Rising population numbers multiplied by rising expectations result in unsustainable levels of exploitation, destruction and pollution of the natural world.
- (d) Fierce competition between role players that are unequally endowed with technological expertise, access to resources and political clout has led to immense and growing discrepancies in productive capacity, income and life chances.
- (e) The relentless pursuit of individual autonomy, wealth, utility and pleasure has undermined the sense of responsibility for the whole, including spiritual aspects, bodily aspects, the community, society and nature.

## 1. Modernity—the underlying thrust

What is it precisely that has led us into this impasse? Humans have always been selfish. Discrepancies in life chances have occurred ever since humans changed from hunting and herding to agriculture and settled in villages, towns and cities. Their impact on the environment has always been devastating. But small numbers and primitive tools kept these detrimental developments within limits. It is modernity that made them explode into life-threatening dimensions.

Moreover, traditional cultures had built-in prohibitions and inhibitions based on long-term collective experiences. Modernity deliberately and successfully undermines such constraints for the sake of economic gain. It is characterised by an emancipatory thrust. It rejects all kinds of authority in favour of the right of each individual human being to autonomy, mastery, ownership, entitlement, self-realisation and fulfilment.

The authorities that are being rejected include God, Scripture, the doctrines and institutions of the Church, inherited philosophies, restrictive values, norms and legal codes, patriarchal family structures, parental authority, hierarchical and authoritarian socio-political systems, and so on.

While the quest for survival, prosperity, freedom, power, status and enjoyment is built into the human psyche, it is contained in traditional cultures by an internalised awe of nature, a respect for superiors, a powerful sense of communal concerns and responsibilities, rigid social structures and clearly demarcated statuses and roles in society.

Modernity has set free the primordial drives from their spiritual and institutional fetters and allowed them to develop their explosive and contagious power. Personal ambition and pleasure-seeking have turned from vices that were severely censured to virtues that are lavishly rewarded.

Modernity has evolved in the West. Elsewhere, I have analysed the reasons why this happened only once and only there.<sup>6</sup> Here, it suffices to say that while not yet the majority culture in the world today, modernity has become the *dominant* civilisation because it is seen to be ‘delivering the goods’—wealth, power and pleasure.

Through modern means of communication, the values, aspirations and desires of modernity are reaching into the most remote rural villages. The superiority of science, technology and commercial activity is there for all to see. The culture of

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<sup>6</sup> Klaus Nürnberger, *Regaining Sanity for the Earth*. London: Xlibris, 2011, chapter 2.

elites has become the model aspired to by subservient and dependent classes, whether on a local or a global scale.

## 2. Consequences

The achievements of modernity have been spectacular. But so have its ambiguities. While human mastery over reality soared, responsibility for reality lagged behind. Modern science has disclosed secrets of nature never understood before. Technology has led to unprecedented powers. Commerce has led to a level of personal and collective wealth unheard of in earlier times. Consumerism has led to a spirit of entitlement and pleasure seeking. But with all these gains, the autonomous human subject no longer feels accountable to a higher authority.

It is modernity that facilitated the *population explosion* by reducing the death rate without reducing the birth rate. It lured humanity into rising *material expectations*. It legitimated the pursuit of *self-interest* at the expense of the interests of others. It dismantled *respect* for the dignity of the natural world. It generated the need for aggressive *marketing* and provided the means of *communication* that made it possible. It provided more potent *weapons* to subdue other humans and *tools* to exploit the natural world.

It is modernity that is responsible for the growing *discrepancies* in productive power, purchasing power and life chances. Scientific knowledge, technological prowess, material wealth, military might and personal life chances have grown exponentially—and there is no end in sight. This glaring success has lured formally traditionalist communities into its vortex. For those who benefit from it, and for those who aspire to reach it, there can be no turning back. Previous modes of maintaining and organising human life are being left behind.

However, in an economy based on the relative capacity of role players to out-compete each other, some are more ambitious, more inventive, more educated, better trained, more experienced, more efficient, more connected, more organised, more endowed with resources, more ruthless, and more dedicated to their own advancement than others. Latecomers to the show are severely disadvantaged. All this leads to exploding discrepancies in productive capacity, financial rewards and life chances.

## 3. The autonomous human being

It is modernity that led to the absolutisation of the human subject and the degrading of the objective world. Subconsciously aware of being the most highly developed outcome of the evolutionary process, modern humans claim unchallenged sovereignty over reality as a whole. Accountability to God, the over-arching and all-inclusive authority, made way for individual human sovereignty. Humans now occupy the status assigned to God in earlier times, but their motivations are geared to their individual and collective self-interest.

Autonomous humans are responsible to nobody but themselves, thus not responsible at all. Reality—including one's body, other people, community, society and nature—has become a quarry to be mined for personal gratification, wealth, prestige and power. This is the root of contemporary short-sightedness, indifference and superficiality. Narrow horizons, short-term motivations and the eclipse of accountability generated the current cultural, economic and ecological impasses.

Let me use a metaphor to make this clear. Each cell in the body has a minute but essential and special function, its own dignity, as it were. The cancer cell that has emancipated itself from its specific function in the body may thrive, be more vibrant, more 'productive'. But it survives and prospers at the expense of the whole. Ultimately, it destroys the body from which it is derived and on which it depends. Moreover, it produces similar cells, even growing clusters of such cells, all of which are not integrated, all of which prosper at the expense of the body.

Conversely, modernity has led to new enslavements. Its emancipatory drive did not lead to genuine freedom. It is the distance provided by faith in God between ultimate authority and the relentless claims of one's life world that makes genuine freedom *from* the world and responsibility *for* the world possible.

Aspiring to be free from accountability to an overarching authority, modern humans lost their transcendent foundation and support. They became helpless victims of the forces governing the world in which they are embedded—biological needs, psychological cravings, social pressures and natural forces.

In sum, science, technology, commerce and the trappings of the consumer culture have placed unprecedented powers into the hands of human agents who were not prepared to handle such powers appropriately and beneficially. The exponential growth of power through science, technology, commerce and financial resources without a concomitant widening of horizons and growth of responsibility may lead us into an economic and ecological disaster of unprecedented proportions.

#### **4. The failure of the Christian faith**

Being the dominant culture, modernity bears the main responsibility for the current impasse. But the Christian faith has failed as well, if only by losing its capacity to counteract the general trend. Early in its history, it forfeited its liberative power. It legitimated oppression and exploitation. It became a target of the emancipatory drive, rather than its critical companion. It was unable to keep pace with the growing power of humanity over reality.

Though designed to facilitate human participation in the higher freedom and responsibility of God, it tried to prevent the emergence of the freedom and responsibility of mature adults envisioned in the New Testament (Gal. 3:23-4:7; John 8:31-36). It questioned scientific research rather than lending it the critical support it would have needed on its way into an urgently desired but unknown future. It failed to act prophetically in view of modern aberrations. By and large, therefore, the Christian faith left a modernising population in the lurch.

There are five major reasons for that. One, theology has cast the dynamic biblical tradition into a static, ostensibly timeless doctrinal system. This began when the Jewish-Christian faith penetrated the world of classical antiquity. The translation of the biblical message into Hellenistic patterns of thought and Roman legal institutions was a valid contextualisation of this message at the time. However, the Greek assumption of timeless validity and the Roman assumption of authoritative structures arrested its inherent dynamic.

Two, we have inherited the dominant versions of this faith from the Reformation and the Enlightenment. Breaking out of the confines and enslavements of the medieval fortress, both these movements were driven by an emancipatory agenda. However, both concentrated on intellectual and spiritual needs at the expense of the body; on the individual at the expense of the community; on the Church at the expense of the society; on the human being at the expense of nature.

Three, in spite of its liberative rationale, the insistence of the biblical faith on human accountability to an overarching transcendent authority cannot be popular in a culture committed to personal autonomy, mastery, ownership and entitlement. Its promulgation of a disciplined lifestyle is felt to be prudish, stuffy and pedantic. In modern secular societies, faith is tolerated as long as it does not interfere with the dimensions of life that really matter, such as sexual relationships, economics, politics and the privileges of social elites.

Four, the historical record of the church is not very reassuring: ruthless acquisition of power, wealth and privilege by its leaders; crusades and conquests; feudal social structures and authoritarian institutions; totalitarian mindsets ruthlessly imposed by Catholics and Protestants alike; legitimization of the abuse of power by secular authorities; misleading superstitions and merciless atrocities.

Five, contemporary Christianity lives in two 'symbolic universes', a mythological-metaphorical world informed by the biblical tradition and an empirical-historical world informed by science and modernity in general. The problem is that you cannot live in both at the same time. Its pre-modern world view has been compromised by modern scientific insights. Its core beliefs seem to be fanciful products of the human imagination.

Some Christians live in the spiritual universe during their devotional moments and in the modern universe during their practical everyday life. Then the biblical message loses its relevance for 'worldly' existence. Other Christians subconsciously apply the empirical-historical criteria of the Enlightenment to the pre-modern biblical tradition and ecclesial doctrines. Then their faith gets into conflict with modern science and ends up the loser.

Bold reconceptualisations of the Christian faith by modern theologians have not necessarily filtered through to the level of Christian communities or the wider society. Where they have, they have caused consternation rather than enlightenment. Certainly one does not attend the festive atmosphere of the Sunday service to be confronted with shaky spiritual foundations and uncomfortable social challenges! In a world of constant flux, one yearns for stable and reliable spiritual foundations.

Faith thus contributed to the secularisation of the West by default, rather than design. But that does not remove its culpability. Believers need to recognise that the world process is the constructive project of our God! Our task is not to uphold and get submerged in an esoteric tradition that makes no sense to our contemporaries, but to become involved in God's creative and redemptive project.

This project began with the big bang and went through momentous stages. The Christian faith could and should have underpinned the powerful thrust into future. However, anchored in the past, it could not keep pace with modern developments. The power of humankind over the earth is accelerating exponentially. Humankind is now located at the crossroads between optimisation and destruction.

## 5. The role of science and faith

Christianity will either rise to the challenge or become an irrelevant relict of history. But it cannot hope to do that on its own. Science and faith are indispensable and complementary human pursuits. Having been co-responsible for the generation of the current impasse, science and faith should be held co-responsible for its resolution. They must again find each other and give direction to a humanity that has lost its way.

‘Best science’ can give faith essential clues about how reality functions, thus helping it to regain its credibility. ‘Best faith’ can give science a new vision, thus helping it to regain its sense of direction. Faith must overcome its negative attitude towards science. Science must be open for the meaning and purpose that faith could provide.

Scientists in various disciplines are able to analyse the causes and consequences of these developments. They can also show ways out of the dilemmas we are faced with. But there is nothing in the mandate and method of science as such that commits scientists to responsible and corrective research, development and leadership.

Why should overall prosperity, social equity and long-term sustainability be more important than the immediate satisfaction of personal needs and desires, the bottom line of commercial enterprises, or the pockets of corrupt bankers, traders and officials? There is no way the sciences can answer this question on the basis of their mandate and method.

Without commitment of any sort, scientists can easily become mercenaries of individual desires and collective interests. They can ruthlessly abuse their knowledge and power at the expense of others, society and nature. It is faith that has the task of calling humanity—including science, technology, commerce and the consumer culture—to accountability before a higher authority.

Faith insists on the validity of God’s vision of comprehensive optimal well-being. This vision translates into God’s concern for any deficiency in well-being in any dimension of life. It invites us to participate in God’s creative and redemptive project. Commitment to this project can be expected of God’s most highly developed creatures. It has become more indispensable and urgent now than ever.

So there is a two-fold thrust in my argument: a factual insistence on the ‘real’ God on the one hand and a dogged insistence on the ‘true’ God on the other. The ‘real’ God is the God who is the Source and Destiny of the reality we actually experience and that the sciences help us to understand, as opposed to the God of pious fantasy and fiction, superstition and wishful thinking.

The ‘true’ God is the God of freedom and responsibility, the God who made endless sacrifices in the suffering of God’s creatures throughout the ages so that we can live and prosper, the God who disclosed God’s intentionality most acutely in the cross of Christ, his human representative. The ‘true’ God is opposed to the ‘god’ of absolutised selfishness and greed, of profit and pleasure, of instant gratification and self-destruction, of sexual extravagance and drug abuse.

**Reader reaction**

At which points can you refute, correct or add to my contentions?  
Is my hope for cooperation between science and faith a pipe dream?  
How would you explain both my proposal and your response to a high school student?

**Let us summarise**

In this chapter, I argued that it was the thrust of modernity towards human autonomy, ownership, mastery and entitlement that dismantled the checks and balances that traditional cultures imposed on human selfishness and greed.

While the achievements of modernity are immense, its consequences in social, economic, political and spiritual terms are highly ambivalent. Vast discrepancies in life chances, unsustainable exploitation of natural resources and shallow materialism are now getting out of hand.

Due to scientific and technological advances, human power over reality has risen exponentially, while responsibility for reality has lagged behind. Insisting on submission to questionable authority, spiritualising its message and harbouring obsolete world view assumptions, the Christian faith failed to undergird the thrust of modernity with a sense of responsibility.

To make a difference, it must take current scientific insights on board and consider them tools in God's creative and redemptive project.

# 3

## Becoming a scientist to the scientists

### Reader reflection

This chapter suggests an approach to reality that is informed by the mandate and method of the empirical sciences.

How would you describe the typical approach of science to the reality we all experience and of which we are a part?

Does the Christian faith necessarily clash with the scientific approach or can it utilise the latter to make its message more credible for an audience informed by the sciences?

### What this chapter is all about

I have recently read an adage that says: ‘I would rather have a mind opened by wonder than closed by belief.’ I can only agree. However, it is not belief that we are after, but faith.

Belief is one’s assent to some unproven assumption that does not necessarily make a difference to one’s life. Faith is entrusting oneself to someone whose reliability and integrity cannot be guaranteed. If I believe that scientists will find water on Mars, it will not disturb me if they won’t. If my wife betrays my trust and walks off with another man, I will be devastated.

This not to deny that the minds of many believers are closed. By dismantling flawed beliefs and unlocking the awesome mysteries of God’s creation, science can indeed open the minds of believers to wonder, respect and dedication. Let us begin with what faith and theology can learn from the scientific approach to reality.

### 1. Experiential realism

Modern science and the Christian faith relate to the same reality we all experience. Science does so from the immanent perspective of nature, faith from the transcendent perspective of God. This implies that science can update and enrich the pre-scientific *world views* in which the biblical faith presents itself, without compromising its divine *message*.

In my effort to ‘become a scientist to the scientists’ (1 Cor. 9:19-23), I have adopted the approach of *experiential realism*, which I consider to be the approach most commonly used by scientists. It is called ‘experiential’ because it concentrates on the reality that we actually experience and that the sciences make ever more lucid for us to understand. ‘Critical realism’ and ‘model-dependent realism’ are similar approaches.<sup>7</sup>

It is called ‘realism’ because it assumes that the reality we experience exists ‘objectively’ and does not depend on the image of this reality we have in our minds. It is keenly aware of the fact that this image is a partial, provisional and perspectival reflection of ‘objective’ reality. But this reflection is sufficiently reliable for us to get an idea of what is out there. It can also be corrected and refined through meticulous observation and research.

The approach of experiential realism is broader than crude empiricism. Empiricism takes for real only what can be registered by our sense perceptions and their technological extensions. Our senses register only material phenomena.

Therefore, empiricism restricts its concept of ‘reality’ to the material world. Meaning, emotion, evaluation, the sense of beauty, conviction and superstition are considered ‘subjective’ and thus unreal. But this approach cannot do justice to the reality we experience.

In the first place, such ostensibly ‘subjective’ phenomena can be described, critiqued, transformed, or abandoned. In the second place, they have substantive consequences in this world. In the third place, such ‘spiritual’ phenomena are based on synaptic networks of neurons found in the human brain, which is a biological organ. In this sense, they are real even in material terms.

As everybody knows, a religious conviction, such as orthodox Islam, or a socio-economic ideology, such as Marxism-Leninism, or a strong emotion, such as sexual attraction, or a deep sense of beauty can profoundly change the course of history. A concept of reality that is restricted to its material aspects is a truncated concept of reality.

The relation between the subatomic, physical, chemical, biological, spiritual and social aspects of reality will form a critical part of our deliberations in this book. In chapter 7, we shall discuss the theory of *emergence*, according to which there are levels of complexity that build one upon the other to produce ever new forms of reality and that cover the whole of experienced reality.

So we shall take account of whatever humans *experience* as real. The natural sciences, the historical sciences, the social sciences, the human sciences, even the science of religion, all have a common methodological point of departure. Insights gained in all these fields refer to immanent reality. ‘Immanent’ means ‘in our hands’, that is, accessible (at least in principle) to our observation, explanation and prediction.

The opposite of ‘immanent’ is called ‘transcendent’. It means ‘going beyond’ our observation, explanation and prediction. God is, by definition, transcendent. But our intuition, notion, or concept of the divine is part of immanent reality. It can be described, critiqued, transformed, or abandoned.

<sup>7</sup> An example of critical realism is Arthur Peacocke, *All There Is: A Naturalistic Faith for the Twenty-First Century*. Minneapolis: Fortress Press, 2007. For ‘model-dependent realism’ see Stephen Hawking and Leonard Mlodinow, *The Grand Design: New Answers to the Ultimate Questions of Life*. London: Bantam Press, 2010, pp. 39-59.

Therefore, we have to account for the intrinsic meaning (what does it refer to?) and the experiential source (how does it arise?) of this concept. Theologians have to struggle for the most appropriate conceptualisation of the underlying experience. If that were not the case, theology would be pointless.

It is often said that modern science came up with insights that are counter-intuitive in terms of everyday experience. This is particularly true for relativity theory, quantum theory, complexity theory and chaos theory. It is important to note, therefore, that the concept ‘experiential’ includes the concept ‘experimental’: when a particular phenomenon or process has been shown to exist or happen and when we internalise its new explanation, it becomes an experiential phenomenon.

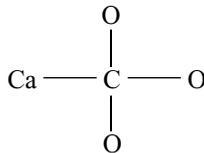
Our knowledge determines the way we experience reality. We may still experience the earth as flat, but we know it is not. We may still experience the sun as ‘rising’ and ‘setting’, but we know it is not. The more we are impacted by scientific information, the more we *see* reality the way the scientists have learnt to see it.

Now that we have described the method, we can explore how it might work in the case of faith and theology. That is the theme that runs through all the pages of this book. Before we come to that, however, we have to indicate which procedures commonly used in theology cannot stand the test of experiential-realist scrutiny. That is the task of this chapter. We have to tidy up our theological reasoning if the encounter of faith with science is to be a fruitful exercise. Let us mention some of the more important instances.

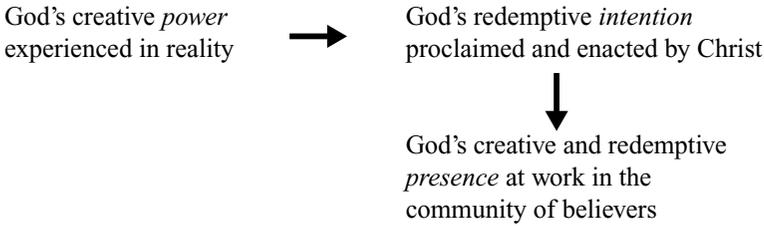
## 2. Occam’s razor

We begin with the most elementary. There is a neat little principle in natural science called *Occam’s razor*. It says that the simplest explanation capable of doing justice to the matter under investigation should be given priority over all others.

Viewed with the eyes of a scientist, much theological academic production could be described as ‘sophisticated obscurantism’. This is not a very kind verdict, but I think it is true. Just look at the beguilingly simple formula of a chemical substance like lime stone ( $\text{CaCO}_3$ ):



A calcium atom is linked with a carbon atom that is again linked with three oxygen atoms. Not a single element in the formula can be omitted, not a single one must be added. If we would apply this principle to the most complex formula in theology, the Trinity, it would perhaps look something like this:



Again, no element can be omitted and none needs to be added to make the Trinitarian doctrine in this form comprehensible. That is how it should be.

### 3. Fantasy, fiction and beauty

Science will ask what happens in our brains when we are attracted to a painting. Technology has discovered the importance of aesthetics in the production of products. Commerce knows that beauty sells. Consumerism is largely about utility and pleasure.

Whether enjoyed or abused, the aesthetic dimension of reality cannot be wished away. Nor should it be curtailed. If we dispensed with dreams, fantasy, poetry, fiction and the whole realm of beauty and attractiveness, we would be much poorer as human beings. We would also lose our creativity and vision.

The natural sciences may seem to have nothing to say on these topics. But the reason is that they are located at lower levels of emergence than what happens in our minds. Neurology can perhaps analyse the electrical impulses, chemical substances and brain waves associated with them, but nothing more.

But that does not mean that they are not real. They are only real at another level of emergence. We should be wary of the confusion between these levels. If a child imagines a terrifying dragon that can fly, spit fire and demand the sacrifice of virgins, this figure is real enough as a synaptic network in its brain, but it is not real at the physical or biological level of reality.

If theology adopts the approach of experiential realism, therefore, this does not imply that the spiritual and aesthetic dimensions in worship, music, art, architecture, or fellowship are unreal, unimportant, or should be excluded from academic research. They are part of the reality we actually experience and they have real-world consequences. They are just not part of what the *natural* sciences are mandated to explore.

### 4. Epistemological scepticism

Epistemology tries to establish how the human subject comes to know the objective reality that might or might not exist out there. Concentrating on the *observing subject*, consistent epistemology tends to become *sceptical*. Can my subjective experiences be trusted to reflect the objective world? Can we even be sure

that such an objective world actually exists? Many philosophers have come to the conclusion that we cannot.<sup>8</sup>

In contrast, the normal practitioner of science concentrates on the *observed object*. This object can be analysed, critiqued, transformed, manipulated, dismantled, reassembled, or discarded. Epistemology highlights the formidable limitations and constraints of the human mind. Science, in contrast, takes the outside world for granted and gets on with the job. That is why we speak of experiential *realism*.

Science is sufficiently self-confident and very successful in doing so. It assumes that the impressions we gain from the outside world through sense perception and rigorous analysis reflect a reality whose existence does not depend on our consciousness. It aims at gaining a picture of reality in our minds that is as proximate to objective reality as possible under given circumstances.

It is self-evident that the observing subject is inextricably involved in the observation of the observed object. All scientific knowledge is provisional, partial, perspectival and interest-related. It is also clear that science works with models of reality that abstract certain features of reality and not with reality in all its aspects and dimensions. But that does not mean that this reality does not exist or that the models do not reflect the dimensions that have been highlighted.

Theology should not hide behind the fact that the human capacity to know the truth is limited and problematic. We must learn from science how to distinguish between what is known, what could be known if we had the means to know it, and what cannot be known, because the human capacity to know is constrained.

That gravity causes water to flow downhill, for example, is a *known* fact. Whether and where life exists in distant galaxies *could* be known, if our means of observation reached far enough into outer space. Whether there are alternative worlds based on different sets of regularities *cannot* be known.

God is transcendent. Something transcendent lies beyond the limits of human observation, explanation and prediction. So God *as such* cannot be known. We can never catch hold of God like an insect and place ‘him’ under a microscope. The best we can hope for is that God ‘catches hold of us’. Then we can describe what it means to be ‘in the hands of God’.

But that is a condition of our consciousness, not a description of the transcendent. We can reflect only on God’s relationship with the world God created and of which we are a part—and that only from our end of the relationship. When we become aware of the fact that we are derived, dependent, vulnerable, mortal, accountable and guilty beings, we do refer to ‘Something’ or ‘Someone’ beyond ourselves. We give that Someone a name, God. But that is as far as it goes.

The Bible is absolutely clear about the fact that God is the great ‘Beyond’, or the ‘wholly Other’, who cannot be observed, explained, or predicted. If that is true, it is fairly useless to speculate about who or what God is within ‘himself’. It is also counterproductive if it creates the impression that the theological enterprise as a whole is nothing but unfounded speculation.

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<sup>8</sup> To get an idea of the debate, I suggest Nancey Murphy, *Theology in the Age of Scientific Reasoning*. Thaka/London: Cornell University Press, 1990.

What can indeed be known is our human intuition, notion, or concept of God. Such a notion is part of immanent reality. It emerged and evolved in human history. It can be described, critiqued, transformed, replaced, or abandoned. As mentioned before, theology would be a meaningless exercise if that were not the case.

The task of theology as an academic discipline is to try and find the most appropriate concept of God, not to get hold of God as such. It can be known, at least in principle, which historical and existential experiences underlie this concept. We can also explore what consequences its different versions have had and still have for our individual lives and our social and natural environments.

What matters in this regard is nothing more and nothing less than how our concept of the self-disclosure of God's creative and redemptive intentionality *emerged and evolved* in biblical history and how we are *impacted* in our lives and in our life worlds today by this self-disclosure.

## 5. Speculation based on reified abstractions

Theologians should refrain from speculating about God. Speculation, as I use the term, has nothing to do with risky behaviour on the stock exchange or wild guesses about the future. Speculation is a kind of reasoning that departs from untested assumptions that are taken for granted and draws out logical inferences or deductions from the latter.

If both the assumption and the logic of the deductions are correct, the derived statements may be correct and we need no empirical proof for the latter. But what if the assumptions are questionable and the deductions made from them do not hold water?

Underlying assumptions can be of many kinds, but two of them are of particular importance in theology. The first is a reified and idealised *abstraction* from experienced reality; the other is a reified and idealised biblical *metaphor*. We will presently come to the latter. For now, let me briefly explain the former.

A *concept* is the name for a particular kind of reality that includes single entities with common characteristics. The concept of 'a flower', for instance, is an *abstraction* from the millions of actual flowers that we experience during our life times. *Reification* means that we mistake such a concept, which merely summarises common characteristics, for something real out there. Moreover, such a reified concept can also be *idealised* as if it were something perfect.

Platonic philosophy assumed that concepts or ideas exist before and after they manifest themselves in actual phenomena. The idea of a chair existed before any concrete chair was made and will continue to exist after all concrete chairs have been destroyed. So ideas are deemed primary realities; concrete things are derived from ideas. Ideas are eternal; concrete things are temporal and transient. Ideas are perfect; concrete things are imperfect reflections of ideas. So ideas are not only abstractions, but they are also idealised as such. Ideas are real in the deeper sense of the word; concrete things are less real, even less than real.

Transcendence is quite different. It intuits a great Beyond, a great Wherefrom and Whereto. This is not an idealised abstraction from energy, time, space and regularity, but the *openness* of immanent reality towards a great Other.

Theology has widely utilized Platonic (later Aristotelian) philosophy during its classical period, when Hellenistic philosophy was in vogue. Towards the end of the Middle Ages, however, the philosophical approach changed to nominalism, which considered such abstractions as nothing but names for the characteristics of different phenomena that can be grouped together.

Nominalism was the precursor of empiricism, which—though in modified form—has become the dominant approach of the sciences today. Theology must abandon its use of idealised abstractions, if it wants to enter into a meaningful dialogue with the sciences.

Let me demonstrate this with an example taken from classical theology: the assumption of God's omnipotence. There are three ways of understanding this concept: as a speculative *postulate*, as a proposition of faith informed by *science*, and as a *pastoral* reassurance.

(a) We can depart from the assumption that God is a perfect being and that perfection implies power without constraints. This is a metaphysical postulate derived from Platonic philosophy. We can now draw out logical conclusions about what God can or cannot do. Can God, for instance, reverse the flow of history so that everything that ever happened would happen again, only in the opposite direction?

Ludwig Feuerbach, a prominent critic of the Christian faith in the nineteenth century, has tried to explain how such an assumption comes into being. Let me put his argument in my own words. We *experience* actual power in many forms in ordinary life—the power of lightning, waves in the sea, politicians, or strong personalities.

We *abstract* the concept of 'power as such' from these experiences. We *reify* this concept, that is, we take it as an actual entity out there. We *absolutise* or *idealise* it as 'omnipotence'. We *project* it into heaven and *ascribe* it to God. From the assumption that God possesses omnipotence, we *derive* the statement that God's resources of power are unlimited. We *apply* it to the question of God's absolute control over time.

But how can we possibly know that? Is there anything in the reality we experience with which we could substantiate this claim? The energy we experience does not function without regularities and constraints. If God created the world at all, then God must have created the world with these constraints in place!

If God's power indeed had no constraints and if that God were a God of unconditional and redeeming love, why would God not simply issue an almighty decree that abolished all sin, evil, suffering, death and destruction with one fell swoop? This is the problem of 'theodicy', which I will discuss in more detail in chapter 7. Suffice it to say at this juncture that the claim has no demonstrable foundation in reality.

(b) Given our faith in God as the transcendent Source and Destiny of reality, we can say with some justification that all energy *actually at work* in reality is *God's* power. This gives us a completely different idea of what 'omnipotence' could mean. Regularities according to which this energy functions are regularities that God has built into the world process. So God is indeed ultimately in charge of reality.

But that does not mean that God can and will do whatever God fancies or whatever we desire. Certainly these regularities are there for a reason. God's creativity works *through* them. The cosmic process that we know and of which we are a part cannot function without them. To assume that God would override or suspend these laws just to fulfil our petty needs and desires overestimates our cosmic significance!

(c) Where we find such a statement in the Bible, it is not meant to speculate about what God can do or not do, but to *reassure* people in desperate situations that our limits are not the limits of God, that the future always opens up possibilities not known to us, but certainly to God, that some kind of resolution of our predicament might be possible, and that, in God's wisdom, God may actualise such a potential outcome, whether through our enlightened observation, our empowered action, or by natural means.

Such *pastoral reassurances* are quite different from the *metaphysical postulate* of unconstrained power. Reassurance accepts the fact that the past cannot be changed, but opens up the future for us. It does not claim that the laws of nature are not valid, but assumes that God can use them for God's purposes. It does not satisfy our curiosity, but invites us to trust that God is concerned about our well-being.

This reassurance does not make us wonder why God is not coming to our rescue, but causes us to direct our energies towards the challenges and opportunities that God opens up for us as we move into the future. Such reassurances are *experienced*. They comfort us, motivate us and embolden us. They have consequences in the world. They are real.

Humans have antennas only for dimensions of reality they need to survive and prosper. They do not need to know what happens within distant galaxies, the minute functions within living cells, or the true character of dark matter. Science can extend those limits slightly, but only slightly.

In the same way, humans can perhaps sense that reality goes beyond the immanent, but they have no capacity to grasp what lies beyond—and they do not need to. All they need is the capacity to register manifestations of the creative power of God and reassurances of the benevolent intentionality of God. Metaphysics uses logic, like science uses mathematics, to extend these boundaries, but the outcome is not very satisfactory and will hardly ever reach finality.

Honest scientists do not claim to know more than can be known and theologians should not do so either. They should keep their eyes and ears close to the ground and see how God's creative power actually works. Science can help them doing so. They should try to figure out in practical terms what divine benevolence would entail in each of the thousand situations and decisions we have to face day in and day out.

We know, for instance, that reality is an extremely complex network of relationships. This includes not just the relationships between human beings, but everything else as well. So God has created reality in this form. We also believe that God stands in a creative and benevolent relationship to the world. But when we project human relationships into the 'inner being' of God as such, this is pure speculation, made worse when anthropomorphic metaphors such as father, son and spirit are used to back up such projections. That brings us to the next topic.

## 6. Speculation based on biblical metaphors

Speculation becomes even more problematic when we make logical deductions from reified and absolutised biblical metaphors. A metaphor is the 'image' of something tangible we use to refer to some intangible phenomenon, truth, or process. The 'right hand of God' is such a metaphor. It refers to the authority, power and agency of God.

It is important that we do not mix up the metaphor with the phenomenon that it is meant to refer to. When Jim calls his sweetheart 'honey', he does not mean to say that she is that sticky stuff that you better not touch, because it will mess up your hands and clothes. It only refers to what he perceives to be her 'sweet' complexion or character.

A naïve reading of the Bible often fails to distinguish between a biblical metaphor and the transcendent entity it refers to. If the New Testament says that Jesus ‘ascended to heaven’ and ‘sits at the right hand of God’, some believers assume that there must be such a ‘heaven above’ and that, after his ascension, the risen Christ must be ‘physically’ located up there. In fact, the metaphor refers to God’s authority conferred to Christ, his messianic representative. Psychoanalysis calls the inability to distinguish between a symbol and the object it symbolises ‘symbolic equation’ and treats it as a psychological abnormality.

The Bible is replete with metaphors. The reason is very simple: God is, by definition, transcendent. We do not possess a language covering what humans cannot know. The language we use for transcendent reality is taken from our experience of *immanent* reality.

All the concepts that refer to God are metaphors taken from everyday human life: father, son, spirit, creator, redeemer, law, wrath, grace, love, righteousness, justice—you name them! John’s Gospel applies a multitude of metaphors to highlight the significance of Christ: word, bread, water, life, way, shepherd, door, vine, son, love, master, etc. Is Jesus literally ‘bread’ or ‘water’ or ‘vine’? Of course not!

But just like an abstraction, a metaphor can be reified, absolutised and taken for granted as if it were an incontestable truth. Then inferences drawn from such an assumption are taken as equally incontestable, because they seem to follow logically from the primary assumption. This procedure can only lead us astray.

Let us take the concept of the ‘Son of God’ for an example. When you read this term in the Bible, what does it suggest to you? Is there a divine Father in heaven as well as a divine Son—perhaps even a quasi-divine mother? Or are these terms metaphors that are meant to refer to the transcendent, or to be more precise, to our *concepts* of the transcendent? There can be no question that ‘Son of God’ is a metaphor.

Let us look at the genealogy of this metaphor. The *original* meaning of ‘son’ was, of course, the *male biological offspring* of a human father and mother. At the first level, this original meaning was then used as a metaphor for an *adopted* son.

That again was used at a *second* level as a metaphor for a *representative* of some authoritative person. Ancient Near Eastern rulers tended to adopt their top administrative officials as sons to bind them to their persons and ensure their loyalty.

At a *third* level, this usage of the metaphor was applied to *the king* as an adopted representative of God on earth. God would uphold God’s cosmic order and channel God’s blessings through the king. We find this usage, for instance, in Psalm 2.

Because the followers of *Jesus of Nazareth* took him to be the messianic king expected by the Jews, the term ‘Son of God’ was then applied as a *fourth* level metaphor to Jesus—together with virtually all other royal titles found in the Jewish tradition: son of David, son of man, image of God, the shepherd, the lord and the anointed (Hebrew: *mashiach*; Greek *christos*).

In the attempt to affirm the *universal validity* of Jesus’s proclamation and enactment of God’s Kingdom, that is, God’s redemptive love for all people at all times and in all situations, Jesus was then proclaimed to be the instrument of God’s creation at the *beginning* of time, God’s activity in ongoing *history*, and God’s ultimate fulfilment at the *end* of time. So Christ was taken to be the King of the expected Kingdom of God; the way God would be present among God’s people; the way we can relate to God while here on earth; the Judge of God’s last judgment; the beginning and end; the *alpha* and *omega*.

We see how the metaphor ascended from the mundane level to the spiritual level. But it did not stop being a metaphor. Moreover, it led to a metaphorical *narrative*, namely the birth of Jesus by a virgin through the agency of the Holy Spirit, as found in the prologues of the Gospels of Matthew and Luke. If these metaphors are now reified and absolutised, we get on slippery terrain.

Was Jesus of Nazareth, the *human being*, God's offspring in biological terms? If that were the case, is God 'himself' a biological creature? Or was he an emanation from the divine being that took on a human form? If that were the case, was he omnipotent, omniscient, eternal, universally present at all times and places? It is clear that such speculations lead us nowhere!

If we believers are invited to share in his new life, sitting with him on his throne (Ephesians 2:4-7), are we then also promised to be almighty, omniscient, and no longer subject to time, space and energy constraints? Hardly! These are perceived attributes of the God who disclosed God's creative and redemptive intentions in Jesus.

In fact, taken literally, the legends of the birth of Jesus from a virgin through the intervention of the Holy Spirit lead to biological nonsense and theological heresy. Biologically speaking, Jesus was a male, which presupposes XY chromosomes inherited from a human father. The divine Spirit cannot be presumed to possess cells containing chromosomes.

Theologically speaking, the cross between a divine father and a human mother would lead to a half-god, or a super-human being. Such figures are common in ancient mythology,<sup>9</sup> but the idea is foreign to the biblical tradition. It is also heretical according to the Council of Chalcedon (AD 451), which decreed that the divine and the human 'natures' of Christ should not be separated, but also not confused.

John's Gospel explicitly clarifies the intention of this metaphor when he substitutes it with the idea of the 'incarnation' in the case of Christ, which is a different metaphor altogether, and applies the metaphor of the virgin birth *to us* believers (John 1:12-14; 3: 5 ff). All true believers participate in the new life of God and are 'born of God' in the *Spirit!*

That Christ functions as the 'Son of God', that is, the representative of God among humans, seems to be a pretty straightforward assumption for all Christians to make. This interpretation is also borne out by many other texts in the New Testament, especially in the Gospel of John.

God, the ultimate Source and Destiny of reality as such and as a whole, manifested God's creative and redemptive intentionality in the proclamation and enactment of God's redeeming love by Jesus Christ, deemed the messianic representative of God.

The 'Spirit' of Christ again permeates, liberates, transforms and empowers the 'Body of Christ' (the community of believers). All this makes immediate sense. No logical impasses and paradoxes are involved in such a simple rendering of the Christological and Trinitarian doctrines. We shall come to these issues in chapter 9.

<sup>9</sup> Gilgamesh, the oldest known character of legendary fiction, written by Sumerians during the second millennium BC, was such a figure. Many similar cases followed. Ironically, his desperate and sacrificial quest for immortality remained unfulfilled—in contrast to what Christians claimed for Christ.

## 7. The nature of scientific hypotheses

Theologians are not the only ones that use their imagination or intuition to penetrate aspects of reality that are currently not accessible to empirical verification. The practice is perhaps most common in disciplines dealing with the past, where evidence is often very difficult to come by, such as geology, evolutionary history, palaeontology, ancient history, and so on. But we find it even in physics, the most basic and most rigorous science of all.

Science cannot be satisfied with limitations imposed on current knowledge. When a science reaches the limits of what can be known at any point in time, it probes into the unknown by putting together the meagre evidence that may be available and exploring possible answers to unsolved questions.

Alternative possibilities are then weighed one against the other to establish the most plausible direction for further research. We call such a provisional theory a ‘hypothesis’, which is something like an ‘intelligent guess’. In physics, mathematical models and extrapolations are used to probe into the unknown. This kind of ‘speculation’ is entirely legitimate, even necessary, as long as one does not confuse assumed possibilities with actual realities.

It is at this point that theology must be wary of following the scientific procedure. Scientific hypotheses anticipate an unknown that can be known in principle and that might come to be known once we find a way of getting to know it. In theology, this is not the case. God is transcendent, and the transcendent is inaccessible in principle. We shall never be able to know it as long as we are situated, as we are, in this world.

It is therefore quite futile to speculate about, for instance, what happens within the ‘Trinitarian God’ as such and apart from the relation of this God to us and our life worlds. At best, such statements can be logical inferences derived from theological assumptions.

Scientists remind us in no uncertain terms that we should not make bold statements about what we cannot possibly know. Least of all should we then absolutise such speculative statements as if they were divine truths revealed by God ‘himself’ and therefore cannot be contradicted.

We should also be wary of jumping too readily on the bandwagon of *scientific* speculations that seem to underpin some of our theological assertions. The statement of conventional big bang theory, for instance, that reality began without any apparent antecedents, is not (yet) based on proven and incontrovertible fact. Even as a scientific theory, it is still controversial.

Being a provisional scientific conjecture, it cannot be harnessed to prove the validity of the theological doctrine of *creatio ex nihilo* (creation from nothing). Moreover, the latter itself is an inference from a speculative assumption about God, rather than revealed or incontrovertible fact. There are many other such speculations, for instance, ‘string theory’, the existence of a ‘multiverse’ (all possible universes actually exist) or the reversibility of time.

## 8. Postmodern relativism

It is not always clear what the term ‘postmodernism’ actually stands for. There is the sophisticated *philosophical* version of postmodernism and there is the general cultural trend of *popular* postmodernity. For some, postmodernism is a further outflow of the emancipatory thrust of modernity. For others it is a total break with modernity. For yet others, postmodernism is a convenient way of legitimating their pre-modern assumptions.<sup>10</sup>

It is this latter variety that I am most concerned about. After the pre-modern assumptions of the biblical faith had been battered for centuries by modern secular thought, many believers and theologians experience postmodern relativism as a welcome reprieve. Postmodern thought seems to imply that because all knowledge is based on assumptions and expressed in metaphors, all views of reality are entitled to claim equal validity. This again seems to restore the acceptability of conventional forms of belief in God, miracles, spiritual healing, angels and demons.

A more sophisticated version points out the structural similarities between scientific and theological conventions, traditions and assumptions. It leaves aside the quest for a link between metaphors and what they refer to. It concentrates on ‘meaning as use’ in believing communities. The ‘symbol’ of ‘God’, for instance, can serve to unite and motivate us even if none of us were convinced that ‘there is a God’.

Of course, postmodernism has a point. It exposes the relativity of all of reality and thus also of all of human knowledge. It rejects the arrogant, overconfident, exclusivist and prescriptive attitude of modernity—as if Western culture were superior to all others. Modernity certainly has no right to impose its narrow and heartless view of reality on precious human faculties such as religious commitments or the creative arts.

Postmodernity wants to appreciate and enjoy whatever humans have come up with in its fascinating, exhilarating and enriching diversity. Certainly the Harry Potter fairy tales are delightful! Why not let our fantasy run wild for a change! So far so good.

But the danger is that science then appears to be only one kind of conviction among others, on par with African religion, Islam, or Marxism. In my view, this is a dangerous illusion. Science is not another kind of faith, just as faith is not another kind of science.

Scientific facts are based on testable evidence, religious faith is not. Scientific theories and hypotheses are provisional proposals that await substantiation, religious certainties are not. Science and technology demand precision; religious convictions defy precision.

With the help of technology, we can direct a spacecraft to a specific spot on a distant planet. The slightest mistake in the cockpit can make an airliner crash to the ground. The same

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<sup>10</sup> Suggested reading: P. Lakeland, *Postmodernity: Christian Identity in a Fragmented Age*. Minneapolis: Fortress Press, 1997.

is not true for religious convictions. Scientists can get very angry if you suggest that their approach to reality is similar to those of prophets, astrologers, or diviners.<sup>11</sup>

Though I would not advise you to do so, you can easily try out whether scientific facts are ‘mere theories’ or ‘unproven assumptions’ by jumping from the tenth floor of a high-rise building. Which assumption will hold water—the quasi-religious assumption that an angel will catch you halfway, or the scientific assumption that you will crash to the ground? Don’t tempt God—it may cost your life!

The valid claim that all humans have the same *dignity* before God and each other does not imply that whatever they have in their heads can claim equal *validity*. To use a metaphor, we are indeed all animals, but there is a qualitative difference between a slug, a zebra and a human being! This is not an arrogant human claim, but a simple fact.

In the same way, there are huge qualitative differences between faith assumptions. The invitation to become a participant in God’s redemptive action, using all the means at our disposal to heal sick people, is different from the claim of a traditionalist diviner that he/she is able to cast out the evil powers causing HIV and AIDS. The first can save your life; the second may cost your life. This is not a matter to be played with!

Moreover, if one believes that all assumptions are equally valid, one also has to believe that they are equally spurious. In the mood of popular postmodernity, convictions have become junk offered on the religious marketplace. Pick whatever you fancy, try it, enjoy it, get bored with it, and discard it! Neither serious faith nor serious science can accede to this proposition. Both faith and science are serious pursuits because they are fundamental for human survival and prosperity.

Finally, one has to recognise, I think, that modernity did not stall in the nineteenth century. The kind of modernity attacked by postmodernists has long been left behind by modernity itself. Modernity is a dynamic movement that continued to unfold exponentially ever since its inception. What is called postmodernism is itself a provisional and very diffuse outcome of this process, rather than something entirely novel and revolutionary.

## Subatomic physics and theological assertions

Postmodern theologians love to refer to subatomic physics to underpin their stance. Relativity theory, indeterminacy, probability, contingency, chaos theory, complexity theory, string theory, the impact of human observation on the phenomena observed—these and other ‘revelations’ gleaned from modern physics seem to justify the spuriousness, vagueness, ambiguity and mysteriousness of theological propositions.

Everything seems to be possible, so why can God not suspend natural laws to perform miracles? Why can we not assume that God will create an entirely

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<sup>11</sup> Suggested reading: M. Ben-Ari, *Just a Theory: Exploring the Nature of Science*. Amherst, NY: Prometheus Books, 2005.

revamped kind of human body (the body risen from the dead), situated in an entirely reconstructed reality (the Kingdom of God)? As visions of what ought to be, such expectations have a function and validity of their own, but can they really be based on the ‘new physics’?

I consider this a dangerous temptation. It conceals the difference between metaphor and referent, between immanence and transcendence, between what has become and what ought to become, between science and faith, between causality and contingency. It suspends the critique of what is no longer tenable and builds a treacherous respectability for theology on unfounded assumptions. Instead of urging theology to give account of its propositions and procedures, it lets theology off the hook.

By implication, it also lets superstition off the hook. Astrology, ufology, Satanology, clandestine oracles, trust in magical means and similar aberrations suddenly become respectable. Before plunging into quantum physics, therefore, we must first acknowledge the validity of Newtonian physics, because theology is about human relationships, and human relationships occur in the macroscopic world described by Newtonian physics, rather than in the microcosm described by quantum dynamics.

The authors of the biblical Scriptures did not have the faintest idea about subatomic physics, so their pronouncements could not have presupposed such knowledge. Theology is not busy with theories about causality, probability, indeterminacy, or chance, but with our living relation with God, the transcendent Source and Destiny of all these facets of empirical reality.

### **Reader reaction**

Can you critique, augment, or improve on my argument?

Is the Christian faith based on experience (of whatever kind), or is it pure fantasy and speculation?

How would you explain both my proposal and your response to a high school student?

## **Let us summarise**

In this chapter, I enumerated a number of approaches used in theology that have to be scrutinised or abandoned if measured against the criteria of experiential realism. Occam’s razor says that the simplest explanation available that is capable of doing justice to a particular phenomenon must be given priority over all others.

We should give ample space for the aesthetic dimension of human life, but avoid confusing fantasy and fiction, which are located in our brains, with entities and events located at the physical level of reality. We should not hide behind epistemological

scepticism but distinguish between the known, the knowable, the unknowable and the transcendent.

We must refrain from metaphysical speculations based on idealised abstractions from reality and reified biblical metaphors. We must distinguish between scientific hypotheses and theological concepts of the transcendent.

Theology must be wary of certain kinds of postmodern relativism that seem to suggest that there is no truth, that the question of truth is of no consequence, or that science is another set of religious assumptions. Subatomic physics cannot be used to underpin the plausibility of theological assertions.

# 4

## Opening up a closed universe

### Reader reflection

Naturalism assumes that reality is all there is, while faith asserts that it is derived from, dependent on, and limited by God, its transcendent Source and Destiny.

Do you think that the universe could indeed be self-generated, self-sustaining and self-sufficient as it is?

If that were the case, would humans, as the most sophisticated and powerful outcome of the evolutionary process, be completely autonomous and responsible only to themselves?

### What this chapter is all about

In the last chapter, I argued that science can help faith and theology to clean out their assumptions and procedures. In this chapter, I argue that faith can prompt scientists to contemplate the possibility of an open, rather than a closed universe.

To ‘transcend’ means to go beyond the boundaries of what we actually experience, or could experience if we had the means to do so. Science does not have the mandate and method to do that. Scientists restrict their work to an exploration of immanent reality. This methodological restraint is essential for the scientific enterprise.

I do not think, however, that one is entitled to deduce a metaphysical theory from a methodological decision, namely the theory that immanent reality is all there is—which is the stance of naturalism. To use a metaphor, you can focus exclusively on the analysis of a particular fruit so as to do justice to its complexity without implying that there is no tree that bore the fruit.

Faith can open up the methodological constraints of the scientist towards a greater vision, without engaging in unfounded metaphysical speculations. In this chapter, I shall try to reveal the essential difference between naturalism as a *metaphysical* assumption and the biblical faith as an *existential* commitment.

## 1. Immanent transcendence

As mentioned above, to ‘transcend’ means to go beyond certain limits, in this case, the limits of the reality that can be accessed by humans. Let me begin with the difference between ‘immanent’ and ‘radical’ transcendence. We experience ourselves as agents within the world of which we are a part. But our range of experience has boundaries. That is self-evident.

In terms of *space*, I am sitting in front of my computer in Pretoria. I cannot be in Nairobi or New Delhi at the same time. In terms of *time*, I am restricted to what is happening at this moment as I am busy typing. What happened yesterday is no more; what may happen tomorrow is not yet. I can remember the past and anticipate the future, but I have no access to either. In terms of *energy*, I am confined to the resources stored up in my body. Some time tonight, they will decline and I will need to sleep.

What I *know* is confined to what I have experienced, what I have read, what I have been told, what I have gone through and thought through. All that knowledge is limited. Werner Heisenberg, a famous physicist, once wrote: ‘The existing scientific concepts cover always only a very limited part of reality, and the other part that has not yet been understood is infinite.’<sup>12</sup> Isaac Newton is reported to have said much earlier, ‘What we know is a drop; what we do not know is an ocean.’<sup>13</sup>

In all these aspects, there are boundaries to our immediate experience and we know that there is something beyond these boundaries. Naturalists will agree with that. But this ‘beyond’ is still part of ‘immanent reality’, that is, the reality ‘at hand’, the reality we actually experience.

So we can speak of ‘immanent transcendence’ in this case. This rather paradoxical term must be distinguished from a kind of transcendence that goes beyond immanent reality as such and as a whole and that is, by definition, not accessible to our observation, explanation, or prediction.

I call the kind of transcendence we refer to when we refer to God ‘radical transcendence’. Because we assume that God is the Source and Destiny of reality and must, as such, be present in all of reality, we could also speak of ‘transcendent immanence’.

Immanent transcendence indicates the *limits* of our knowledge of immanent reality in terms of space, time, energy and regularity. Radical transcendence indicates *dependence* of all of immanent reality, including time, space, energy and regularity, on something greater and more fundamental that is entirely beyond our grasp.

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<sup>12</sup> W. Heisenberg, *Physics and Philosophy: The Revolution in Modern Science*. Amherst, NY: Prometheus Books, [1958] 1999, p. 201.

<sup>13</sup> I picked up this telling quotation from a German calendar and translated it back into English.

## 2. Radical transcendence

Is there something more fundamental than the reality we experience and the sciences explore? Or is there nothing but immanent reality, including those aspects of reality that are not immediately accessible? Is immanent reality closed in upon itself, rather than being embedded in, or sustained by, something beyond itself?

Has the energy of which it is composed simply popped into existence out of nowhere; are the regularities according to which it functions the product of its own dynamics; does the world process generate itself, maintain itself and destroy itself? That is the assumption of naturalism—the view that nature is all there is.

This is an assumption that many people informed by modern science seem to share. But is it self-evident? Is it credible? Is it desirable? Whatever it may be, the naturalist assumption is *not a scientific finding, but a metaphysical postulate*. Believers are guided by the opposite assumption, based on the intuition that reality is open, rather than closed.

This intuition has existential rather than metaphysical roots. Humans experience themselves as being derived, dependent, vulnerable, mortal, accountable and culpable beings. Accountable to what? Or to whom?

Our lives are embedded in our life worlds; life worlds are part of the universe. It is quite obvious that we owe our existence to the processes prevalent within immanent reality. But does our derivation, dependence and accountability stop with the world we experience? This is the assumption of the naturalist.

Or is the universe with all its parts and dimensions open towards an ultimate and intangible Authority, Source and Destiny? This is the intuition and conviction of the Jewish, Christian and Muslim believer.

### Is radical transcendence a credible proposition?

We cannot verify this intuition empirically. But apart from philosophical or theological considerations, there are questions in modern science that cannot be answered and that make it at least plausible, if not likely, that reality is not closed in upon itself but depend on something beyond itself.

What was there ‘before’ the big bang? What will be ‘after’ the big crunch (or the infinite dispersion of all energy)? What is ‘beyond’ the spatial boundaries of the universe? ‘Where’ did the energy that constitutes and drives the world process come from? How did the regularities according to which it functions originate? Why does time run in only one direction? Why does space only have three dimensions? Are the laws of nature necessary or contingent? Why is there anything at all and not rather nothing?

Maybe these are wrong questions to ask because our parameters of reality—time, space, energy, regularity and contingency—only came into existence with the onset of the big bang and will eventually disappear into nothingness. If that were the case, there would be no ‘before’, no ‘after’, no ‘outside’, no reason, no meaning.

Alternatively, there may be an eternal rhythm of evolutionary construction and entropic collapse.

But does this have to mean that the reality we know is closed in upon itself, that there is nothing beyond time, space, energy and regularity as naturalism assumes? This does not seem to follow. Believers consider the assumption that reality is derived, dependent, and (in the case of humans) accountable to a higher authority, rather than self-generated, self-sustaining and autonomous to be more in line with human experience.

As far as immanent reality is concerned, the Christian faith and naturalism overlap. Both relate to the reality we experience. Both are able to use scientific methods to explore what exists and happens within this reality. If their findings differ, these differences can only be sorted out by science, not by faith or naturalism. God is not part of experienced reality, let alone a ‘supernatural’ part of immanent reality, but its transcendent Source and Destiny.

God’s intentionality and agency manifest themselves through inner-worldly means—the energy that makes up our world, the regularities according to which it functions, the subatomic, physical, chemical and biological processes that make up our bodies, the synaptic structures and processes in our brains, the shape and orientation of our consciousness, the structures and processes of our society and of our natural environment.

For naturalism, the phenomena that the sciences observe, explain and predict are all there is. For faith, they are only tools or manifestations of the creative activity of God. God consciousness bundles and integrates our genetic propensities, our disparate memories, our sense impressions and the continuing information flows to which we are exposed into a dynamically evolving system of meaning that is ever aiming at inner consistency. Faith in one all-encompassing divine embrace signifies the most comprehensive apprehension of an unfathomably complex network of relationships.

### 3. Existential questions

If that is the case, what difference does the assumption of a transcendent Source and Destiny of reality make? Is God not the proverbial ‘invisible Gardener’ who ostensibly makes plants grow but whom one can safely ignore because we can explain reality perfectly well without the crutches of the ‘hypothesis of God’?

As emphasised in the first chapter, faith in God is not about observation, explanation and prediction, but about meaning, acceptability, authority and vision. Metaphysics deals with theoretical considerations, for instance, why is there something rather than nothing? Such questions have no answers, at least not answers we could give at present with any degree of confidence.

However, existentially speaking, they are not all that relevant either. For faith, there are more pressing questions. All living creatures are derived, dependent, limited, vulnerable and mortal beings. Humans are no exception. But humans have a more highly developed sense of being embedded in larger contexts. And this is where faith plays an indispensable role.

Humans remember the past; they anticipate the future. They do not just fear danger, pain and death, as all animals do; they have a profound sense of the precariousness of human existence, human life worlds, even reality as such. They must build on the past; they must provide for the future. They are faced with options; they must take decisions. They know that their decisions may have beneficial and detrimental consequences; they are aware that they must account for those consequences.

So human life is characterised not only by fear, but by anxiety. Fear is caused by a danger that is known: a snake in the grass, a criminal in the bedroom, a cancer growth in the breast. Anxiety is caused by dangers that are not known. What if I lose my job, my retirement savings, or my health? What if my corrupt practices and shameful acts are exposed? What if my time runs out before I have fulfilled what I consider the purpose of my life? What if climate change, overpopulation, food insecurity, or nuclear war catches up with us? What if the earth is less stable than we always assumed?

People with more profound sensitivities may ask even deeper questions: What is it that constitutes the foundations of the universe or its ongoing dynamic? In which direction does the world process move? Is this direction beneficial? Is it reliable? Will it end in a state of well-being or in a giant catastrophe? What is our role in all of this? Is our daily life moving in the right direction?

May we focus on the fulfilment of our selfish desires or must we be concerned about the needs of the community? Are the interests of our communities in line with the interests of society? Does the society behave in a way that humanity as a whole—including future generations—is served or harmed? Do humans have a right to exploit and destroy other creatures?

Against this background, the issue whether the reality of which we are a part is closed in upon itself or whether it is open towards an ultimate Source and Destiny is suddenly no longer a theoretical question. It places our lives on a particular foundation. It determines the dynamics of our very existence. It calls for answers, however inadequate and provisional these answers may be.

So there is a metaphysical and an existential concept of transcendence. Existential transcendence means that you transcend yourself and your life world towards a higher Source, Authority and Destiny. You are no longer constrained by your own insights and resources. You entrust yourself to God.

Opening yourself up to this great Other, you allow yourself to be liberated, empowered and used for God's greater purposes. You share in God's inclusive vision. You trust that God may find ways and means to move closer to this vision, even when it seems to be impossible. That is a living, existential, rather than a theoretical, speculative kind of transcendence. This brings us to the core of the matter.

#### **4. The autonomous human being**

Of course, naturalists also ask such deeper questions and find their answers. However, because for them there is nothing beyond, they will tend to focus on the regularities found in nature and build on the goodwill found in humans. Is that a good alternative to faith in God? Faith in God as transcendent Source and Destiny includes the regularities of nature and the goodwill in humans. So that is not the issue.

The issue is that, if we deem the world closed, it seems inevitable that we will consider ourselves, as the most advanced product of the evolutionary process,

autonomous. With no higher authority around, we will claim the status of sovereign masters, legitimate owners and sole beneficiaries of reality.

Once we have come to take that kind of certainty for granted, however unconsciously it may be, we may consider everything else in reality to be subject to our control, to exist for our benefit, and to be at our disposal. This includes our own bodies, communities, societies and nature.

Depending on the traditions within which we received our formation, we may be highly sensitive to the precariousness of human existence and the needs of other creatures. But we may also consider ourselves entitled to vanquish, oppress and exploit reality to our advantage at the expense of others, future generations and the natural world.

With no higher authority around, this is entirely up to us. I do not think that this possibility is far-fetched, because it is precisely how modernity, with its persistent drive towards human mastery, ownership and entitlement, actually functions.

One can argue, of course—and this has often been done—that it is the biblical faith that has legitimated, even mandated, the subjugation of the natural world to human domination and exploitation. The text normally quoted in this regard is Genesis 1:28-30: subdue and fill the earth! For three reasons, this argument is spurious.

One, to assume that humans began dominating and exploiting nature only after they had been told to do so by an obscure text hailing from an insignificant tribe living in the middle of the first millennium BC is rather far-fetched.

Two, the injunction to subdue and fill the earth made profound sense in prehistoric times, when humanity was in danger of being overpowered by the forces of nature, suffering constant losses, even becoming extinct. The text may reflect ingrained memories of these times. The fact that we have now reached a stage in history where the earth is ‘subdued, filled and flowing over’ and where nature is groaning under the oppressive domination of humanity only means that we have to reconceptualise our divine mandate.

Three, the text itself does not bear out the contention. In the Ancient Near East, ‘image of God’ was one of the titles of the king as representative of God on earth. Through the king, God would uphold God’s cosmic order and channel God’s blessings. Humans are defined by the text as representatives of God. They are tasked to care for the other living creatures on earth and they are accountable to God in doing so. A similar notion is found in the older creation narrative, where Adam is required to cultivate and care for the garden (Gen. 2:15).

It is worth noting that, according to the text, humans were initially allowed to eat only fruit and seeds, but no animals (Gen. 1:29). The consumption of meat was only sanctioned after the great flood, when God decided to accept animal sacrifices and spare the earth from total destruction (Gen. 8:20-21). We cannot go into the theological reasons for the change. The point is that awareness of the sanctity of life clearly manifests itself in these narratives.

## **5. The enslaved human being**

Conversely, if experienced reality is all there is, the human being is inextricably and inescapably entangled in its network. We are unable to distance ourselves, not just from this or that, but from reality as such and as a whole. This has immediate existential consequences that have often been analysed by sociologists and social psychologists.

We become victims of the physical and biological processes that constitute our existence, the needs and desires emanating from our brains, the structures and processes of our social environment, the need to conform to cultural norms, the pressures of peer groups, fashions and fads, the collective interests that drive political and economic administration and decision making, and the ideological legitimations of these interests that impose themselves on our consciousness.

It is the transcendent perspective that is able to objectify reality radically and, in this way, make it possible for us to acquire a sense of *freedom from* reality and *responsibility for* reality. If the world is *not* all there is, if it is open towards a transcendent Source and Destiny, it does not ‘have the last word’. It has no intrinsic authority over us. It cannot lay ultimate claims on our lives. It cannot dictate our behaviour. It is not God.

Without transcendence, the self is not only embedded, but imprisoned in reality and assaulted by reality. It seeks to ward off, vanquish and subdue reality, rather than accepting it as a gift of God, entrusted to its care, and allowing it the space to unfold its own potential. Yet the self may lack the spiritual strength to control the reality in which it is embedded—which in turn is a gift of faith in the power and benevolence of the transcendent.

Again, it can be argued that the biblical faith did not prevent the self-aggrandisement, abuse of power and arrogance of Christian emperors and popes, chauvinists and dictators, bosses and husbands, bishops and televangelists. In fact, the biblical faith was regularly used to *legitimate* wars and conquests, colonialism and imperialism, patriarchy and slavery—from biblical times up to the present.

All this can unfortunately not be disputed, and we Christians must own up to the abuses and failures that we allowed to happen. The question must be asked, however, whether these aberrations were due to the inherent thrust of the Christian message, or to the seemingly irrepressible forces within the human psyche that the Christian faith is supposed to control and overcome.

According to the biblical witness, wanting to be like God, even utilising God (and God’s Word) for the pursuit of individual and collective self-interest, is the most basic sin of the ‘old Adam’ (Gen. 3:5). In contrast, Christ, the new human being, is depicted in the New Testament as a servant, rather than an oppressor and exploiter (Mark 10:35-45).

It is common knowledge that Christians are prone to fail as much as other people. But that is certainly not due to their faith. It is due to their lack of faith. Conversely, because naturalists are so intimately connected with nature, especially if they are natural scientists, they have often outperformed Christians in their concern for nature and the future of humankind.

This must simply be acknowledged, if not envied. But again, the question is whether this is due to their naturalist assumptions as such or to other factors: perhaps their intimate contact with nature, their genetic predisposition to be sensitive to the pain of other creatures, or the subconscious impact of a caring tradition on their childhood formation.

What is accessible and existentially relevant for us is not the existence of a great Beyond as such, therefore, but our openness towards a transcendent Source and Destiny of our own existence and our own life worlds. It is this openness that indicates awareness of our derivation, dependence, vulnerability, mortality and accountability.

God consciousness makes it possible for us to ‘rise above’ reality into a higher kind of freedom that allows us to accept responsibility for this reality. And this is

existentially, socially and ecologically of critical importance. Perhaps there is no such Beyond. But even then we would still need some kind of anchor, as it were, some kind of compass, some kind of lifeboat in the raging sea.

I love the metaphor of the astronaut that gets disconnected from her spaceship and flies helplessly and aimlessly into outer space. Thank God, we are nailed to our planet by the force of gravity. There are countless other heavenly bodies in the universe. But it is our cosmologically insignificant little planet that keeps us firmly on the ground and makes it possible for intentionality and agency to have an effect.

Frankly speaking, we cannot do without some kind of faith that sets some basic parameters of meaning, acceptability and authority for our lives and our life worlds, that is able to stabilise us and keep us from wobbling out of control. In view of the spiritual entropy that we observe all around us, any kind of conviction and commitment is better than no conviction and commitment.

## 6. What kind of faith?

If we deem reality to be an open system, the question immediately changes from formal considerations to essential content: from which *kind* of Source is reality derived and towards which *kind* of Destiny is it meant to move?

To begin with, God is our name for the ultimate Source and Destiny of reality *as a whole*. It is not pinned down to our petty needs, interests and desires. God consciousness has comprehensive horizons.

However, a name does not say much as yet. For the name to be meaningful, it must refer to something specific. Again, who or what is this God? Is God an impersonal mechanism, an indifferent fate, a cruel tyrant, a strict law giver, a merciless judge, or a loving father?

When we realise that we are derived, dependent, vulnerable, mortal and accountable beings, we cannot help but ask to which ultimate authority we are responsible; which 'entity' will have the well-being of our reality at heart; to which overall movement we can entrust ourselves; which spiritual power is capable of granting us authentic lives that are serving the interests of the whole.

All religions strain towards an understanding of the character of the divine, the ultimate foundations of reality, the valid definition of what reality, including their own lives, ought to become. These are questions that science cannot answer. This is an authenticity that technology cannot produce. This is an asset that commerce cannot sell. This is the need that our exorbitant lifestyles cannot fulfil.

Such considerations place us inexorably before an ultimate authority on which our life and our life world depends, to which we are accountable, an all-significant Other, the ultimate Source and Destiny of reality. It is at this level that the most important and penetrating questions make themselves felt.

Is humanity entitled to treat the rest of reality as a quarry that can be mined to satisfy its yearning for power, wealth, status and pleasure, dismantling the very infrastructure without which life itself cannot survive and prosper? If not, is the incessant struggle for status, wealth, power and pleasure so deeply ingrained in our genetic system that it is inescapable? If not,

who will represent the interests of those not yet born? Who will represent those who cannot fend for themselves? Who will represent non-human creatures? Who will represent the whole of reality?

God does. People with a vivid God-consciousness do. Christians assign a very specific content to their concept of the transcendent. It is a God of creative power and benevolent intentionality, a God who has a vision of comprehensive optimal well-being and who invites us to participate in God's redemptive project.

Representatives of the highest authority can afford to move into the deepest abysses of reality, being empowered by participation in God's creative and redemptive intentionality and agency. This has been prototypically enacted by Christ on his way to the cross. This is the kind of freedom and responsibility the Christian faith aspires to attain.

Living consciously in the presence of God, we see reality from above, as it were, 'with the eyes of God', and our specific location, significance and function within this reality. We gain the assurance that, whether beneficial, caring and pleasurable or detrimental, demanding and horrifying, experienced reality does not have the last word. There is a greater 'where-from', a greater 'where-to', a greater authority, a greater source of fulfilment, a greater validity.

For God, all of reality is unique and precious. God expects us to see our own interests in the context of the interests of the community, society, humanity, nature and the universe as a whole. Having created us in God's own image, that is, as God's representatives on earth, God invites us to participate in his creative and redemptive project.

This project aims at the comprehensive optimal well-being of reality as such and as a whole. The status and role allotted to us is that of God's representatives on this planet. This is where our lives gain their meaning and fulfilment. This is where we attain human authenticity—nowhere else.

The question is not, therefore, whether God exists or not. As the ultimate Source and Destiny of reality as a whole, God cannot exist the way other things exist in this world. God is not one of the factors within reality that compete or cooperate with other such factors.

God is the transcendent Source and Destiny of all of reality, including all of these factors. Once again, the question is not whether God exists; the question is, rather, what *kind* of God we serve and whether we gain our authenticity or miss our destiny as free and responsible representatives of this God.

## 7. The realism of faith

As I see it, God consciousness is more realistic than naturalism. Negatively, it reflects the actual facts of our derivation, dependence, vulnerability and mortality. Its great variability is due to the vast number of potential responses to the vast variety of historical, cultural, religious and existential situations humans encounter as they move through time and space.

Positively, it reflects the actual facts of our accountability, our propensity for freedom and self-realisation, and the significance of our responsibility for the greater whole. In my view, it is the absence of a sense of accountability to a higher authority,

the sense of being the autonomous master, sovereign owner and sole beneficiary of reality that is delusory—and objectively so!

### **Reader reaction**

Which of my contentions do you find enlightening and which do you find particularly problematic?

Can you critique, augment, or improve on my argument in a particular case?

How would you explain both my proposal and your response to a high school student?

## **Let us summarise**

In this chapter, I dealt with the difference between naturalism, the metaphysical assumption that immanent reality is all there is, and the intuition of faith that reality is open towards a transcendent Source and Destiny.

There are many aspects of the world we experience that are not directly accessible to human observation, analysis and control. This phenomenon is called ‘immanent transcendence’. In contrast, ‘radical transcendence’ says that reality as a whole, including all its accessible and inaccessible aspects, is derived from a transcendent Source and geared to a transcendent Destiny.

What really matters, however, are the existential questions. It would seem that naturalism implies the absolutisation of immanent reality—leading to enslavement of the human subject—and the absolutisation of the human subject—leading to claims to sovereignty, mastery, ownership and entitlement that can violate the dignity and well-being of reality.

The issue then is the gift of freedom from reality and the expectation of responsibility for reality. Both presuppose a substantive content of our concept of God. The Christian God is a God of creative power and benevolent intentionality, as manifest in the history of Israel and culminating in the Christ event. This brings us to the next chapter.

# 5

## The biblical tradition — the objective reality of faith

### Reader reflection

This chapter deals with our approach to the biblical Scriptures from an experiential perspective.

Would you be able to pinpoint a few biblical texts that are particularly problematic in terms of modern scientific insights?

Do you think that the Christian faith demands that we accept the historical and empirical veracity of these assertions or is there another way of interpreting them?

### What this chapter is all about

When we come to believe, something happens in our brains. A new kind of dimension seems to open up for us. That is the ‘subjective’ side of faith. We will come to that in the next chapter. But faith would not emerge if the content of what we come to believe were not communicated to us.

This happens through the proclamation and enactment of the biblical message by other believers. Following Paul in Romans 10:14-17, the Reformers were adamant that the biblical message does not fall from heaven directly into our hearts, as it were, but comes to us from outside ourselves (*verbum externum*). The ‘Word of God’ must be proclaimed, accepted and enacted to have an effect.

The contemporary articulation and enactment of the biblical message is, again, based on a tradition that emerged and evolved over a millennium of ancient history and made its way through two further millennia until it reached us. From where we are, it will again proceed into the unknown future.

There is nothing strange about this fact. As the ‘Creator’, the biblical God works from within the reality God created. ‘The Word became flesh’ (John 1:14), that is, a concrete historical entity that has developed its own history. This is not only true of the Christ event, but also for the Israelite-Jewish tradition leading up to it.

Therefore it would be more appropriate—and more congenial to the approach of experiential realism—to say that the ‘Word of God’ emerged and evolved in human history. Faith will assume that this process was caused and continues to be utilised as such by the transcendent God to make God’s creative and redemptive intentionality known to humans. The biblical Scriptures claim that this is indeed what happened. ‘Revelation’ is a process of

communication. Any communication has two aspects—the way it happens as a process within experienced reality and the content that is being communicated.

There is a difference between the reality that we *experience* and that the sciences clarify for us, on the one hand, and the meaning of that reality that we *proclaim* in the name of God and to which we commit ourselves in faith. Following this lead, I distinguish in this chapter between the *reality* of how revelation operates (which the historical sciences can describe) and the *meaning* or perceived ‘*truth*’ of the revelation (which faith proclaims).

## Section I

### The ‘reality’ of revelation

Believers base their certainties on the ‘revelation’ of God in the biblical Scriptures and the doctrines of the church based on the Scriptures. From the very outset, we have to emphasise that it is not God as such that has been revealed, but God’s creative power and God’s benevolent intentionality.

Experiential realism can teach faith a few things about how ‘revelation’ actually happens. Later chapters will show that insights are based on existential experiences involving our brains and our minds. Only what is mediated through our faculties of intuition and understanding can become real for us.

For that to happen, however, it must first reach us in one form or another. Just as our bodies did not drop ready-made from heaven, but were the result of a developmental history, beginning in our mothers’ wombs, our spiritual insights are the result of a history of concrete processes in this world—whether in our minds or in a tradition that reached us from outside ourselves.

Formally, ‘revelation’ happens when the human mind catches a glimpse of an unknown entity, relationship, or process—quite irrespective of its particular content. Revelation can also mean becoming aware of a greater whole and the place of particular phenomena within it.

That is as true for science as it is for faith. Insight comes about when disparate elements of previously held knowledge and new information fall into place. Some educational psychologists have called it the ‘aha-experience’. Ideally, all untenable assumptions are eliminated in the process. A new, provisional, but relatively consistent view of reality emerges.

#### 1. We cannot construct the ‘truth’

This means that humans are *recipients* of ‘revelation’, whether religious or scientific. They can be passively ‘overcome’ by a new insight or they can purposefully pursue new insight. But they cannot construct the ‘truth’. We can formulate conjectures, hypotheses, or theories and see whether they will work or not. But an artificial construct will not convince us. The ‘truth’—even a provisional, partial, or

misleading ‘truth’—imposes its validity on our consciousness, or our minds will not recognise it as such.

Faith has always realised that the transcendent cannot be grasped by human effort; otherwise it would not be the transcendent. For us to come to know anything about God’s creative power and benevolent intentionality, God must disclose it to us (Rom. 1:19, 10:14-17). No amount of agony and struggle can make that happen.

Experiential realism says that God uses earthly means to reveal God’s power and intentionality. This implies that people driven by the desire to penetrate the transcendent may be more open for such an intuitive self-disclosure than those who are not. As we shall see in chapter 5, there may also be developmental predispositions, laid down by infant conditioning, that facilitate such openness.

In some ways, this is also true for science. Sometimes, humans stumble across a new insight. However, in modern times, scientists have embarked on a determined, systematic, structured and costly journey of discovery. This motivation opens their senses and their minds for new insights.

But the elements of immanent reality explored by science must be amenable to disclosure, and that is not automatically the case. Reality can be very complex, obscure, incomprehensible, even inaccessible. Some scholars claim that while religious irrationality is natural, modern science is counter-intuitive.

The mysteries of subatomic physics are a good example. They have come to light only during the last century. They have not yet reached the closure of a definite theory. Countless observations are made, countless experiments are conducted, and countless theories are tried out to explain the mechanisms leading to particular phenomena. In the end, reality may reveal itself. Or it may not. In this sense, even science is blessed with a somewhat irregular and not always sustainable sequence of ‘revelations’. Thomas Kuhn has made a classical analysis of this process.<sup>14</sup>

## 2. Yet science and faith differ fundamentally

Science explores and describes immanent reality; faith intuits the nature of the transcendent Source and Destiny of reality. The language of science is ‘factual’; the language of faith is metaphorical. It cannot be otherwise. Because we have no direct experience of the transcendent, we have no language for the transcendent.

However, if the metaphorical expressions of faith are mistaken to be quasi-empirical descriptions, they become counter-factual and lose their credibility. The insistence of science on empirical evidence or historicity can help believers discern and acknowledge the metaphorical character of their own religious language.

Once Christians realise that biblical language was never meant to be scientific language, but a means to express the nature of our relationship with God, they are relieved of the burden of having to believe and proclaim something that does not seem to make sense in strictly empirical or historical terms.

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<sup>14</sup> T. S. Kuhn, *The Structure of Scientific Revolutions* (second enlarged edition). Chicago: University of Chicago Press, 1970.

Pre-modern authors were not constrained by the criteria of the Enlightenment, that is, empirical evidence, historicity and rationality. They were free to use all linguistic tools at their disposal to bring their message across: poetry, parable, metaphor, myth, legend, fiction, miracle story, allusion—you name them.

As we have seen, ‘Son of God’ is a *metaphor*, expressing the status of Christ as God’s messianic representative on earth, rather than a historical description of Jesus. The deception of Eve by the snake in paradise is a *myth*, expressing the fallibility of the human being, rather than a historical account.

The narrative of the prodigal son is a *parable*, meant to illustrate divine grace, rather than the historical account of something that happened within a real family. The narrative of the wise men guided by a star to the newly born Jesus is a *legend*, expressing the universal significance of the Christ event, rather than historical fact.

The expectation of the coming Kingdom of God is a *vision* of what ought to be, rather than the prediction of a future political dispensation expected to arrive within historical time. The transformation of water into wine is a *miracle story* meant to highlight the divine authority of Jesus.

In all these cases, ‘revelation’ is something that happens to the human psyche facilitated by the infrastructure of the human brain. A window seems to open, a curtain drawn, a cover removed. Darkness becomes light.

We will discuss the operation of the human brain in chapter 8. For now, we only note that no human insight whatsoever falls ready-made from heaven. It is mediated through the material stuff of this world, subject to its built-in constraints, and channelled through human consciousness.

### 3. The evolutionary dynamic of human insight

So ‘revelation’ can never reveal anything unless it passes through the human capacity of intuition, awareness, or understanding. Being human, this capacity is neither perfect nor unlimited nor uniform.

In terms of *space*, ‘revelation’ is always specific and situation-bound. We always know only a fraction, a particular aspect, a tiny excerpt of the whole. What we discern as the truth is always a model of reality that highlights and combines certain aspects, rather than reality as a whole.

In terms of *time*, it is a process. Insight emerges and evolves in history. We never come to understand all of reality all at once. It always travels along evolving traditions. Such a tradition may entail progression, stasis, or retrogression in terms of validity, complexity and clarity.

The inclination of humans may be conservative, even restorative; or they may be progressive, even enterprising. Seekers of the truth may be led by curiosity, responsibility, or self-interest. Each of these motivations will impact the emerging picture.

Does all this disturb us? It should not! God is not bound to the doctrinal proposition that, to be the Word of God, this Word should be void of human imperfections. Doctrinal formulations must get their clues from how the Word of God *actually* operates in an imperfect world, because this is the way that God discloses God’s creative power and God’s redemptive benevolence to us.

Critical biblical scholarship will therefore be guided by a ‘hermeneutics of suspicion’. In which historical situation did the author write? In which situation did the reader read? Where in the social hierarchy were authors and readers located? Which cultural assumptions guided their understanding?

What were the hidden interests and motives of the author? Which hidden interests and motives determined the reader? Which previous certainties did they bring to the text? And how will all this have to change when the message of the text is applied to a changed historical situation such as our own?

#### **4. The emergence and evolution of the biblical tradition**

The Israelite-Jewish faith has been remarkably aware of the historical and situational character of the relation between God and humankind. Ancient authors may have been less able to overlook the long-term developments of human consciousness than we are today, but they placed the biblical tradition deliberately in the context of religious history as a whole, including pre-Israelite intuitions, convictions, rituals and institutions.

Two observations are remarkable in this respect. In the first place, the story of Israel, as depicted in the Bible, is embedded in a mythological and legendary framework that covers the whole history of primeval humanity. Given their pre-scientific character, we should not expect historical precision from these ancient narratives. Historicity in the modern sense of the word was not a criterion of truth at the time. Even if the biblical authors had wanted to provide precise historical accounts, they would not have had the necessary information to do that.

The point is simply that the biblical authors assumed that the Israelite faith was located in human history as a whole. On the basis of archaeological research, we may today arrive at more appropriate conjectures of what actually transpired. In historical research, a ‘conjecture’ is an intelligent guess of what might have happened on the basis of all the information available. Obviously, we cannot be too certain of their accuracy either.

Apparently, the earliest religious intuitions of a transcendent dimension of reality in the Ancient Near East developed gradually in various dynamistic, animistic, polytheistic, monotheistic, ethical and mystical directions. The most fundamental insight throughout this history was an awareness of the discrepancy between what is and what ought to be. Initially, this could take the form of awe, uncertainty, anxiety and fear of unknown sources of power.

This again led to a yearning for the ‘benevolent’ operation of these powers. To begin with, the understanding of transcendence may have been very rudimentary, located in a tree, an animal, a fetish, or an ancestral spirit. But in time, ancient Israel believed it to be located first in a clan god, then a tribal god, a national god, the god of all nations, the God of all transcendent powers, and eventually the God of reality as a whole.

The overriding concern during this history always remained the dialectic between power and benevolence. A God without power *cannot* redeem; a God without benevolence *will* not redeem. A transcendent power that is not benevolently disposed towards us and our life worlds must be reconciled or appeased or awakened. An evil counter-power must be overcome.

In the second place, it is not by chance that the Bible is composed of stories! Primeval thought did not operate with abstract concepts, but with symbolic narratives. Invariably, these stories belonged to certain geographical, historical, cultural and religious contexts.

Invariably, they were reformulated and reinterpreted again and again to fit changing circumstances, thus forming a living tradition. Responding to new world views, situations, predicaments, temptations and depravations, traditions underwent an evolutionary process. They also differentiated into various sub-traditions.

The Bible is full of examples. The two creation narratives in Genesis 1-3 belong to two different sources. There are different accounts of the exodus from Egypt, the covenant, the law, the kingship, the priesthood, the sanctuary and the cult. The Gospels give different accounts of the birth, ministry, death and resurrection of Jesus and their significance for us.

There are different assessments of the Mosaic Law in relation to faith in Christ, for instance, in Paul's letters, the Gospel of Matthew and the Letter of James. The Gospel of John and the Book of Revelation offer two completely different interpretations of the eschatological future.

At every stage in this development, those who proclaimed the message insisted on its validity. They derived their authority from an assumed divine mandate. They often suggested that the message was immutable and that nothing should be added and nothing should be taken away (Deut. 4:2; Rev. 22:18).

The concern for absolute validity should not surprise us because the concept of God suggests stability and reliability in times of change. A change of the message would have suggested fickleness. They also wanted to resist the all-too-human temptation of skirting around, or watering down, the divine claim on their lives.

But when we glance over the vast sweeps of history from our modern vantage point, we can see that the message did in fact change—and very radically so. Some things may indeed seem to be absolutely valid, but only for particular situations and under particular circumstances.

Abraham could not circumvent the claim of God on his son. But Luther famously said that he was not Abraham and he was not told to sacrifice his son! The Word of God is a dynamic process, not a timeless edifice of propositions.

## 5. The recency of the biblical tradition

Though much older than modern science, the Israelite faith is a fairly recent phenomenon when seen in the context of the history of religious phenomena as a whole. The history of *homo sapiens* may run into 200 odd millennia. The Israelite faith is no older than three millennia, or four at best. It also underwent a dramatic evolutionary process.

It takes some humility to realise that humankind was able to survive and prosper for thousands of years without the benefit of biblical convictions—and the vast majority of humans still do so today. Its Jewish version only crystallised out in the middle of the first millennium BC. The Christian faith again emerged as an offshoot of Judaism half a millennium

later, that is, about two millennia ago. That accounts for no more than about 0.001 per cent of the history of humankind.

Human history constitutes, again, a tiny fraction of cosmic history. So in the context of the vast sweeps of cosmic and human history, the Christian faith is a very recent phenomenon. Believing that the end of the world was imminent, various texts in the New Testament state that God's revelation in Christ has come at the *end* of times. That was said against the backdrop of apocalyptic expectations of an imminent end of this world. While this assumption proved to be flawed, it also reflects the realisation that we are privileged latecomers.

Recency says nothing about validity. Scientific insight concerning the nuclear process that fires our sun is not invalid, after all, just because it emerged only during the last century. Dinosaurs and sharks are not superior to humans because they emerged and evolved earlier than humans.

At least from the perspective of the Christian faith, earlier stages in the history of religion may have been groping in the dark while laying the foundations on which later insights could develop. By Paul's admission, even the Christian faith is still groping in the dark (1 Cor. 13:12).

While on their way, humans do gain valuable insights, but they may also entangle themselves in wrong assumptions. This is as true for the Christian faith as for any other conviction. It is also true for pre-modern world views embedded in the biblical tradition. It is true even for modern science.

Both the truths and the flaws of ancient world views live on in our Christian traditions. It is science that can help us sort out our heritage—beginning with the realisation that we are indeed busy with human history and not with some kind of supernatural sequence of events, or an unmediated divine 'revelation'.

## 6. Hellenistic abstractions from reality

On its way through history, the biblical tradition encountered the Hellenistic frame of mind and contextualised its message in terms of this mindset. This process began when the Jewish people became part of the Hellenistic empires after the conquests of Alexander the Great. It continued with the entry of the Christian message into the Gentile world and came to a head in the early Middle Ages.

The contextualisation of the biblical message in ever new views of reality is, of course, entirely legitimate. But there is always the danger that the message may become too adapted, or even subservient, to a mindset it seeks to overcome. This happens in African Christianity today. It happened in Europe throughout the Middle Ages and beyond. And it happened in antiquity when it got caught up in the Hellenistic way of interpreting reality.

While ancient Israel thought in terms of *history* (events), ancient Hellenistic philosophy focused on *ontology* (being). While the Hebrews saw reality as manifestation of God's dynamic intentionality and agency, Greek philosophers sought an eternal, universal and harmonious 'essence' behind the fleeting 'existence' of a particular historical phenomenon.

In Platonism, it is the *idea* of an entity that gives shape and reality to the crude material of an entity. The idea exists before its concrete manifestation in material reality and continues to exist after such a manifestation has become the victim of time. In Aristotelianism, it is the *form* that strains towards its perfection, gradually overcoming the imperfections of its material substance.

This 'ontological' approach was also applied to the concept of God. For the Hebrews, God was the dynamic *Source* of ongoing historical processes; for the Greeks, God was the ultimate, timeless, universal *Being*, as opposed to concrete *existence* in time and space. Here, the concept of the 'divine' referred to the immortal, immutable, unmovable ideal of the Good, the True and the Beautiful.

In fact, Platonic ideas are idealised abstractions from the actual flow of reality as we experience it. We mentioned that in chapter 3. Of course, we cannot do without abstractions, but in Platonism, they were taken as real entities out there, in fact, more real than the concrete things we find in this world. The ideal is, of course, always superior to the imperfect, fleeting and unreliable entity we encounter in actual life. But is it also real?

## Fundamentalism as a consequence

As we have seen, theologians have used such idealised abstractions as points of departure for further deductions, thus building an edifice of seemingly sound, yet unproven propositions. The fundamentalist concept of revelation is a good example for this practice.

Here, an untested assumption is taken for granted, namely that the concept of God implies perfection. If God is perfect, it follows that God's Word must be perfect. That is a deduction from the basic assumption.

The second assumption emerged from the controversies during the Reformation. Protestants insisted that the Bible was the only guideline to the truth, while Catholics insisted on the validity of both the Scriptures and the ongoing tradition of the Church. Both absolutised their claim to the truth.

If the Word of God is perfect, it follows that its carriers, whether the Scriptures of the Bible or the doctrinal propositions of the Church, must be perfect. They cannot possibly contain any imperfections. Again, we have a deduction from a basic assumption.

That is the basis of the twin doctrines of the inerrancy of the Scriptures in Protestantism and the infallibility of the doctrinal pronouncements of the Episcopal authorities represented by the Pope in Catholicism. Because God's Word was deemed perfect, it was taken to be eternally and universally valid.

And because the Word of God was believed to be identical with the Bible or the ecclesial doctrine, the latter had to be perfect and sufficient for all people of all times in all situations—the one Word spoken to all of humankind, irrespective of particular predispositions, conditions, or situations in which individuals, communities, or societies may find themselves.

The static nature of idealised abstractions made it possible for the Christian Church to develop an elaborate system of doctrines and declare it binding orthodoxy. The same happened to Christian institutions. The church became virtually identical with the Kingdom of God.

Without doubt, the endeavour of Church leaders and theologians to establish authority, validity and conformity played a role in this development. The combination of doctrine and institution went through history as a bulwark of 'the truth' against all challenges, deviations and heresies.

This development was not without its merits, especially in times of turmoil, uncertainty and destructive variability. At the very least, it provided some continuity with the past and some common ground between different variations of the tradition. Perceived aberrations could be exposed and rejected. Without that, the Christian proclamation and the Christian theological discourse could easily have fizzled out into countless nondescript claims and assertions. In time, its identity could have been lost. The dialogue between theologies and denominations would have had no common basis to fall back on.

But with the static character of classical doctrine, the Word of God also lost its capacity to respond to new world views, situations and predicaments. This is a serious handicap in times of accelerating change, as we witness it today.

While all this is understandable as a historical phenomenon, we must not be bogged down by a static set of assumptions. Our attempt to re-conceptualise the fundamental certainties of the Christian faith in terms of new insights and new situations would not be possible if the Word of God was a static, immutable monument that had fallen ready-made from heaven.

## 7. Historical science provided a more tenable approach

It is in this respect that the historical sciences can come to our rescue. They expose the underlying assumptions of biblical fundamentalism and doctrinal orthodoxy as spurious. Reality—all of reality—is in flux. It operates in space. It is dependent on energy discrepancies.

‘Truth’ is mediated through human brains, which are not infallible. It is related to concrete situations, which constantly change. There is indeed continuity, but there is nothing immutable, eternal, universal, or self-sustaining in the reality we know. If the whole of reality is in flux, the concept of perfection loses its meaning.

That there is no perfection in physical, chemical, biological, psychological and social reality is obvious. What humans have in their minds is no exception. That is how the reality in which we are embedded functions, and it is in this reality that we encounter the Word of God. There is no other.

The Bible is explicit in its assertion that we cannot ascend to some sort of perfect heaven to meet God there (Rom. 10:6-8, quoting Deut. 30:11-14). It says, rather, that God’s Word enters our world to meet us where we are (Rom. 10:6; John 1:14; John 1:1-4). It becomes part of human history, undergoes a historical process, and develops its own history. As such, it becomes vulnerable to human imperfections and historical forces. Historical-critical research into the various biblical traditions has revealed the evolution, the situational variability, and the involvement of the biblical message in human power struggles.

So the Bible, the doctrinal traditions and our own preaching and teaching are not perfect, and they cannot be. To many Christians who would like to build their lives on absolutely unshakable foundations, this may come as a shock. There is a lot of denial and make-believe among dedicated believers and theologians in this respect. But it does not help. A snake has to burst out of the constraints of its old skin on a regular basis; otherwise, it cannot grow.

Without any doubt, the ‘Word of God’ as it is actually found in the biblical Scriptures displays a rather disjointed, changing and messy character. If this is how the Bible originated, then this is what God has in fact been doing. God is more tolerant of human frailty than our doctrines allow for. We must respect that, rather than cling to idealised notions about our ‘sacred’ texts.

The Bible has a lot of images suggesting change: putting on new clothes, drowning and emerging from the baptismal water as a new being, leaving childhood behind to become an adult. These metaphors of change without losing one's identity are applicable to us, thus to our historical evolution under the impact of the Word of God, and therefore they are applicable to the Word of God on its way from one historical situation to the other.

However, the fact that the Word of God is inherently provisional, variable and flexible is not a deficiency, but its proper strength. God's sacrificial, redeeming love picks us up where we are—in our needs and predicaments, in the depravity and ambiguity of our motivations, in the imperfection of our insight, in the problematic character of our institutions—and leads us a few steps on the way towards the vision of comprehensive optimal well-being.

When you read the Bible, therefore, expect it to be a messy collection of documents, written over a whole millennium of ancient history and belonging to a time between three and two millennia ago. It was compiled by many different people, living under diverse circumstances, responding to many different situations, falling into many different temptations, pursuing many different agendas, and undergoing a constant process of renewal.

This and no other is the kind of document that God uses to speak to us, if we believe that God is speaking to us through these documents at all. To fully appreciate this fact demands a humble and critical mind. When reading the Bible, we must be intensely aware of the historical, situational character of all human traditions and the pitfalls of all human communication.

## 8. The nature and function of the biblical canon

This is not the place to go into the complex history of the biblical traditions and the subsequent traditions of the worldwide church.<sup>15</sup> That task is tackled by various academic disciplines such as Old Testament studies, New Testament studies and the history of doctrine. Suffice it to say that the empiricist demand for irrefutable historical evidence can hardly be met by these disciplines.

The sources are not precise enough to make such precision possible. Antiquity did not know, believe in, or follow the criteria of the Enlightenment. The motivation driving the biblical authors is the proclamation of the message of God's demand and God's gift to their contemporaries, rather than providing reliable reports of historical events. Therefore, it is not at all easy to arrive at anything approaching objective historical facts.

If that is the case, why then do we stick to the Bible? Judaism assembled particular documents to make up the Old Testament Canon (or the Jewish Bible). It was a relatively recent and rather long process that happened only between the second

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<sup>15</sup> I have depicted the evolution of the biblical tradition in two other publications. For the original research see Klaus Nürnberger, *Theology of the Biblical Witness: An Evolutionary Approach*. Münster: LIT-Verlag, 2002. For a more popular version see Klaus Nürnberger, *Biblical Theology in Outline: The Vitality of the Word of God*. Pietermaritzburg: Cluster Publications, 2004.

century BC and the second century AD. The early Christian Church did the same for the New Testament Canon, which was accepted in its present form by virtually all Christians only by the middle of the third century AD.

Canon means ‘guideline’. Some documents considered authoritative or revealing were included. Others were excluded, some because they were considered useful, but not normative (the so-called Apocrypha), others because they were considered heretical, such as the Gospel of Thomas. From their content, it is not always very clear why some were included (for instance, Song of Solomon, which is a popular love song) and others were excluded (for instance, Jesus Sirach, a very remarkable text).

The combined Old and New Testament Canons are accepted by all Christians, not because they are divine rather than human, not because they are perfect rather than imperfect, not because they are eternally valid rather than situation-bound, but because they bring us closest to the earliest phases of the Jewish-Christian tradition.

We hope and pray, after all, that even our own preaching and teaching may represent the Word of God, inspired by the Holy Spirit, in spite of all their inadequacies. In this sense, the biblical authors are our colleagues, only that they lived in a phase of history that was more foundational for the Christian faith than ours.

The canon is meant to mark some kind of origin, some kind of identity and some kind of direction. It acts as a common reference point, thus an implicit bond of unity, for all Christians. It provides a commonly accepted area within which differences of interpretation and conviction can measure up to each other and make their particular proposals.

It is almost like a constitution that lays down certain basic principles for acceptable thought and behaviour. As such, it is quite indispensable and we should praise God for its existence. But it cannot take the place of our responsibility to find a critical and appropriate version of the Word of God for our times.

I have found an appealing image for the role of the biblical canon in the Christian faith community. It resembles the barrel of a gun. The barrel is short, but open in front and pointed in a particular direction. Its function is to guide the bullet (the Word of God) on its way to its distant destination (contemporary human reality). Just as the barrel should not be mistaken for the actual weapon, thus taking the place of the bullet, the biblical canon as such should not be mistaken for the Word of God, thus taking the place of the thrust of the divine message it is meant to convey. It is nothing but a vessel, a tool, a conveyer belt.

## Section II

### The ‘truth’ of biblical revelation

So much for the *reality* of biblical revelation as an immanent phenomenon that is subject to scientific scrutiny and description. What then is the *truth* of biblical revelation, that is, the ‘divine’ meaning or content of the biblical message? It should be clear by now that we cannot claim to be busy with anything like an *absolute* truth

in this regard. We can only deal with what humans *consider* to be the truth at any given point in time and in any given situation.

However unpalatable the idea may sound, even the ‘truth of God’ is subject to historical flux and situational variability. It emerged and evolved in history, beginning with rudimentary forms and gradually reaching wider horizons and greater depths. That is the way God chose to organise God’s creation, and that is the way God utilises God’s creation to make ‘himself’ known to us.

## 1. An emerging truth

The most ancient appellation, Yahweh Zebaoth (=Yahweh of the great armies), suggests a God of war, victory, liberation and conquest. When the Hebrew nomads moved into the fertile land, the question arose whether Yahweh was also a God of nature, or whether this function belonged to Ba’al, the Canaanite god of fertility.

Over time, deeper questions arose: Was Yahweh also the God of social structures and national cohesion? Indeed ‘he’ was. Of international power struggles? Indeed. Of national catastrophes? Indeed. Of widows, orphans and strangers? Indeed. Of personal authenticity? Indeed.

Yahweh was the ‘God of Abraham, Isaac and Jacob’, then the ‘God that brought Israel out of Egyptian slavery’, the God who granted Israel a unique covenant at Mount Sinai, the God who allowed Israel to occupy Palestine, and the God who established the Davidic kingdom. Gradually, it gained wider horizons and greater depths, culminating in the Christ event, and heading towards ultimate fulfilment ever since. It also spread out in a variety of sub-traditions that are not always compatible with each other.

Again, what seems to be a weakness of this tradition is its strength. The Word of God articulates God’s creative and redemptive response to changing human predicaments, needs and moral derailments. It is formulated in terms of changing world views. As such, it is dynamic and versatile. It is not a fixed body of propositions, like an impressive but static monument, but the living address of God to living people in concrete situations by a living community of believers.

## 2. Its essential thrust?

Careful study can expose the *inner rationale* of the message that drives the biblical tradition forward through all its variations. Reduced to its most fundamental core, it is the proclamation of God’s creative power and God’s redemptive benevolence. This God—the God on whom reality as a whole depends for its existence and its meaning—is *for* us and *with* us and not *against* us. That is the essential message.

Note once more the two basic aspects: our dependence on God’s *creative power* and our faith in God’s *benevolent intentionality*. When God’s benevolence is applied to the human being, it translates into God’s gift of human *authenticity* or

righteousness. Human authenticity is defined as participation in God's love, that is, participation in God's creative and redemptive project. This project is oriented towards God's vision of comprehensive optimal well-being for reality as a whole.

God's love has cosmic dimensions. It is concerned about God's creation as a whole. It determines the beginning, duration and end of cosmic history. This implies that, when God's benevolence is proclaimed to humans, these humans are tasked with a mission. As the transcendent Source and Destiny of reality, God is deeply concerned about the whole of reality rather than our petty spiritual, individual, communal and social self-interest.

Being all-encompassing, the vision of comprehensive optimal well-being translates into God's concern (thus our concern) for any specific deficiency in well-being in any dimension of life within our entire social and natural environment.

Being in intimate communion with God means being one with God in purpose and action. God's agenda is not the demand for perfection, while we are on our way, but a commitment to transformation. God's intentionality is heading beyond all obstacles and ambiguities towards ultimate fulfilment.

A vision is not a prediction, but a goal, thus an orientation. God has no peace as long as what *has* become does not represent what *ought* to become. This fact accounts for the strange combination of deep peace and disconcerting restlessness in the mind of a believer. We have never reached it; we have never arrived; we are always on our way with God. Yet we are always at home in God.

### 3. The Christian understanding of revelation

The assurance of God's creative and redemptive benevolence emerged and evolved in the history of Israel, which is again embedded in the history of humankind as a whole. According to the Christian faith it culminated in the Christ event. Why do Christians take the Christ event as the culmination of the biblical tradition?

Jesus of Nazareth proclaimed and enacted *God's suffering, transforming acceptance of the unacceptable*—in marked contradistinction to God's firm, pre-formulated and seemingly incorruptible demand for social justice, personal righteousness and ritual purity as formulated in the Mosaic Law and promulgated by the Jewish leadership of the day.

That is the core of the Christian tradition, its innermost truth. It is what brought Jesus and Paul and many of their followers into conflict with the leaders of the Jewish faith community. It created space for the sick, the unclean, the outcasts and the guilty in the fellowship of believers. It made the opening up of the 'people of God' for non-Jews possible.

Jesus claimed divine authority for his proclamation, attitude and behaviour. This claim was expressed in terms of the Jewish royal tradition. In the Ancient Near East, the king was deemed the representative and plenipotentiary of God on earth through whom God upheld God's cosmic order and channelled God's blessings.

Disillusionment with the constant failure of the Israelite kings to be true representatives of God had led to the expectation of a genuine king—the Anointed,

the Messiah, the Christ. This was the origin of Jewish messianism. Jesus was seen by his followers and the young Church as the fulfilment of this expectation.

All the titles attributed to Jesus in the New Testament are royal titles: the Son of God (harking back to Ps. 2), the Son of David (harking back to prophetic promises made to the Davidic dynasty), the Son of Man (harking back to Dan. 7), the Anointed (Hebrew *Mashiach*, Greek: *Christos*) and the Shepherd. Harking back to Psalm 110, even the concept of the high priest in the Letter to the Hebrews was modelled after the legendary priestly king of Jerusalem, Melchizedek (= king of righteousness).

At first, the capture, humiliation and execution of Jesus as a heretic, blasphemer and rebel against the state seemed to undo these expectations. As it turned out, however, these catastrophic events thrust the disciples of Jesus into far greater depths of insight.

Getting their clues from the ‘Suffering Servant’, as depicted in Isaiah 53, they realised that God exposed ‘himself’ in God’s representative on earth to human depravation, misconception, humiliation, suffering and death. In other words, the self-communication of God went all the way into the deepest layers of the human predicament to break it open from within.

The proclamation of the ‘resurrection of Jesus from the dead’ and his elevation to the ‘right hand of God’ signified God’s affirmation of the divine authority of Jesus when he proclaimed and enacted God’s suffering, transforming acceptance of the unacceptable.

This is what made Jesus Christ the pivotal centre of the Christian faith. He was seen as the true God acting through the true human being, the prototype of a new human reality. All humans were invited to participate in the new life of Christ, sharing God’s creative and redemptive intentionality and activity. In chapter 9 we shall spell out these propositions in greater detail.

### **Reader reaction**

Do you think that I have given up on the validity and reliability of the Word of God?

Can you briefly summarise your own position over against some of my contentions?

How would you summarise my arguments and your response for a high school student?

## **Let us summarise**

Like all human ‘knowledge’, the certainties of the Christian faith have emerged and evolved in human history. In this regard, they are similar to the insights of modern science. The difference is that science explores immanent reality, while faith

intuits our relation with the transcendent Source and Destiny of this reality. Though the biblical tradition is much older than the scientific tradition, it is still very recent when seen in the context of human history as a whole.

The biblical Scriptures are the concrete evidence of a collective faith that emerged, evolved and differentiated in history, moved through time and space, and has had concrete consequences for millennia. We looked at this tradition from a historical-critical perspective, which is the perspective of experiential realism.

In contrast with Hellenistic abstractions from reality, the biblical Scriptures are quite explicit in their insistence that the message they proclaim is geared to historical processes and situational particularities. Their preferred linguistic tool is not the abstract noun, but the verb, thus the narrative.

The function of the biblical Canon is to give this message a historical foundation and a substantive direction, rather than to arrest the dynamic thrust of the tradition. Theological assumptions that revelation consists of a set of eternal, immutable and inerrant propositions—whether in the form of biblical texts or doctrinal statements—are untenable and must be abandoned.

Historical-critical research into the origin and meaning of the biblical Scriptures can make invaluable contributions to developing a more appropriate approach to these ancient documents.

Regarding the essential content of revelation, the ‘Word of God’ is the creative and redemptive response of God to changing human needs, predicaments and depravities. It reassures us that God is for us and with us and not against us.

The essential content of its Christian version is the proclamation of God’s suffering, transforming acceptance of the unacceptable as manifest in the Christ event.

# 6

## **The power of the Spirit — the subjective reality of faith**

### **Reader reflection**

This chapter tries to understand what happens in our minds when we believe in God as a psychologist would see it.

Do you think that God speaks directly ‘into our hearts’ or does God involve our innate faculties of perception, interpretation and emotion when making his intentions known?

Can you think of biblical texts that seem to substantiate your assumption?

### **What this chapter is all about**

In the last chapter, we discussed the ‘objective’ dimension of what constitutes the biblical faith, that is, the particular tradition that emerged, evolved and differentiated in ancient Israelite history and that provided the basis for the proclamation and enactment of its message ever since.

We are now ready to enter into the ‘subjective’ dimension of faith in Christ, that is, what happens in our minds when this message reaches us and falls on fertile ground. Again, God consciousness is part of the reality actually experienced by humans. It can be described, critiqued, transformed, or jettisoned. It has concrete consequences. Yet it constitutes the existential core of a living faith.

Science is about an immanent object studied by a human subject. Faith is about the awareness of being the human object of a transcendent subject. That is the difference. Yet the human phenomenon of faith is part of immanent reality and can be described and explained as such, at least in principle. This is what we attempt to do in this chapter.

Faith experiences are intensely personal, although the person concerned is always part of a community and embedded in a life world. For individual believers, God is present and real as an emerging and evolving God consciousness that has determined and continues to determine their concrete life histories.

Existential experiences can only be fathomed from within such experiences. Therefore, I will share my personal faith experience as an entry point to the argument. While it may not be typical, let alone normative for the Christian faith, it is

a telling example. I will then subject this kind of experience to an analysis in terms of developmental psychology.

## What is faith?

Before we continue, I have to state more precisely what I mean when I am speaking about faith. Faith is not the same as belief. Belief is the acceptance of a set of propositions. Such propositions do not have to make a difference to one's life.

Faith, in contrast, constitutes the very foundation of life, at least in the existential sense of the word. In contrast to a scientific theory, which may make sense to us or not, faith determines our very existence. It is personal conviction, trust and commitment.

This explains why faith does not depend on a scientific understanding of how reality is put together, while scientific findings do not call for existential commitment. Science is about knowledge; faith is about healthy relationships—notably our relationship with the very foundations of the reality in which we are embedded.

Using a metaphor, we may not know how gravity works, but it keeps our feet firmly on the ground. Without gravity, we would be thrust into outer space. We could no longer move around or make any impact on our environment, however much we exerted our will power and our muscle power. In fact, our bodies would dissolve and with them our minds.

I can be in love with a young lady without having a clue about how her physiological and psychological systems function. I can also believe in a God whose 'true nature' is shrouded in mystery. Although it is always *embedded* in a system of meaning, faith as such is not a world view or a metaphysical construct.

Faith is also not an intellectual pastime. Faith is not something like a scientific theory. Faith is trust and self-entrustment. You walk on ice, as it were, not knowing whether it will carry your weight. If it doesn't, you are in trouble. It is also costly. If you truly believe, you have to forfeit what cannot be reconciled with your faith.

## Section I

### The onset of faith in God

#### 1. An uncanny presence

When I was a student some sixty years ago, something extraordinary happened. There was this young lady—one of thousands of others. First I did not notice. Gradually, her presence made a difference. It is as if a strange kind of light began to illumine my life, my environment, my studies, my work and my relationships. Eventually, I realised that I was not whole without her.

That does not mean that I knew who she really was. To be honest, after living with her for more than half a century, I still do not really know. I just knew that she

belonged to me and I belonged to her. I no longer wanted to live without her. She had become my home. Without her, I would be a stranger wherever I went. My life would be incomplete, dull and meaningless.

The psychological mechanism of ‘falling in love’, as explained by neurology and psychology, was not all that unusual in my case. It happens to every healthy adult. But the meaning the event gave to my life in existential terms proved to be foundational for the rest of my life.

Something much stranger happened to me almost simultaneously. I hailed from a secular social environment. But I was exposed to the largely unspoken assumptions, assertions and life processes of a Christian community. It had a profound impact on me. I got the impression that I had been ‘engulfed’ by a much more penetrating light than the light of my sweetheart.

The world of which I was a part assumed a higher quality. I became intuitively aware that I and my life world were derived from some greater Other, dependent on some greater Other, accountable to some greater Other. I somehow sensed that this Other was the mainspring of reality as a whole. It was mysteriously present, yet inaccessible.

Who or what could claim to be the ultimate *Source* of my life and my life world? That was not immediately apparent. It is still not very clear to me after half a century of theological teaching and research. All I sensed was a loving embrace of whatever made up my own life and the whole of my life world.

Moreover, I became dimly aware that I and my life world were not what they should be and could be. I became aware that there was something outstanding, something to get right, something to repair. Who or what could claim to be the ultimate *Destiny*, the meaning, the purpose, of my life and my life world?

Again, that was not immediately apparent. But I had a profound sense that my life had been claimed for something of ultimate consequence and significance. I realised that I had encountered the elusive authority on whom my life depended, who defined my authenticity and to whom I was accountable.

Again, this Other was somehow present—closer to me than my skin—yet I could not catch hold of it. It was in me and all around me, claiming and qualifying all my relationships. Owing my very existence to it, and having been ‘grasped’ by it, it was beyond my grasp. It represented ‘that for which Christ had taken hold of me’ (Phil. 3:12) and that I had not taken hold of, namely my own authentic being!

We call something of which we are intuitively aware without being able to experience it in any direct kind of way ‘transcendent’. The encounter with God is an indirect encounter. It is mediated through our sense of being derived, dependent, relational, vulnerable, mortal and accountable. It is beyond explanation; it is virtually ineffable.

Various biblical authors insist that we do not, and cannot, ‘see God face to face’ (1 Cor. 13:12). Much later, I told my students: Theology cannot study God and should not claim to do so. God is not part of the reality that we experience and of which we are a part, but its ultimate Source and Destiny.

We cannot catch hold of God as we catch hold of an insect and put it under a microscope. But God can catch hold of us, and then we can try to figure out what it means to be in the hands of God. That is what theological reflection is all about.

It is when I encounter my own potential authenticity that I encounter the One who defines and demands this authenticity and who is the only One that can grant it—the ultimate Source and Destiny of reality. The biblical Scriptures testify to this kind of experience in a great variety of ways. They attribute it to the life changing work of the Spirit of God. It is called the ‘Holy’ Spirit because it displaces what the Bible considers to be an ‘unholy’ spirit.

## 2. Authenticity is relational

To be authentic means to be what I am meant to be. The sciences that I studied at the time did not and could not tell me what that was. I had begun my career as a farmer. I studied natural sciences and agriculture. I majored in economics. I became a government servant as a ‘junior professional officer’ involved in development planning.

But when exposed to the way an extraordinary white pastor served an African congregation, I felt a persistent call to become a theologian, an ordained minister, a missionary. After considerable inner struggles, I yielded. In time, I was led by objective challenges, personal gifts and social circumstances to become a lecturer and researcher. That is how my life unfolded.

These are specifics pertaining to my particular life. What matters for me as a believer is whether I am part of the creative and redemptive project of our God. And that seems to be a Christian universal. There is no meaning, no peace, no fulfilment in the life of believers, unless they are what they feel they ought to be ‘in the eyes of God’.

And that is never fully attained. I can go through all the sources of satisfaction that my environment and my financial means allow me to afford, yet my life will not really be fulfilled. Moreover, this deeper fulfilment is not something that I could accomplish. It is a gift—the gift of a new relationship.

Because this is a relationship with the transcendent Source and Destiny of reality as a whole, it is a relationship with *reality* as a whole, including other individuals, community, society, nature and the cosmos. My relationship with a living and loving God will determine all my other relationships. And that is what really matters!

We have a name for this all-significant Other—God. There are lots of other names, in lots of other languages, but for practical purposes, let us stick to this one, as long as we understand what we are talking about! This name stands for the One in whose presence our inauthentic lives can be exposed and transformed into authentic lives, the One who is the ultimate Source and Destiny of our lives and our life worlds.

## 3. Faith as existential commitment

Faith means that I yield to this experience. I let myself in for it. I abandon provisional foundations, deceptive sources of satisfaction and illegitimate claims on my life. I entrust my life to this all-significant Other. I allow the brilliance of God’s

presence to penetrate one aspect of reality after another, reveal what ought not to have become and confront me with what ought to become.

I allow myself to be gifted with the motivation and the power to make changes for the better in my own life and my life world as far as circumstances permit and as far as my powers take me and entrust the rest to God's infinite patience and mercy.

All relationships are vulnerable, and our relationship with God is no exception. A relationship is constantly under strain. Alternative relationships constantly vie for priority positions. Other 'gods'—convictions, social pressures, claims, demands, values, norms, customs, fads, loyalties, desires—want to take the place of the one true God.

Moreover, my own inauthentic self constantly tries to assert itself against the gift of my authenticity. It is a constant struggle between what we are and what we ought to be. We constantly succumb to waywardness, and we constantly depend on the renewal of our relationship with God as a gift of grace.

This then is the kind of faith that I experienced in my youth and still experience in the more mature phases of my life. But how did all this get into my head? Let us now analyse this phenomenon in terms of developmental psychology.

## Section II

### 'Real' faith in terms of developmental psychology

When we deal with the theory of emergence in chapter 7, we shall see that the structures of consciousness we find in our minds are based on networks of synaptic relationships between neurons (nerve cells) in our brains. The brain provides the hardware, as it were, on which the software of the mind can run. In short, spirituality is based on psychology, and psychology is based on neurology (or brain science). The relation between spirituality and biology is *that* close!

### God the author of our faith

The assumption that all these phenomena can be explained, or at least made more lucid, by neurology and developmental psychology first threatened me. But this fear was based on the naïve belief that God was in some way a factor within immanent reality in competition with other such factors. If my sense of God could be explained in terms of my own brain functions and my psychological conditioning, it seemed to me, it could not have been a genuine sense of God 'himself'.

But Christians believe that the world that science explores, including my own psyche, is the world God created and continues to create! The theological tradition speaks of 'continuous creation' in this regard. At least in principle, therefore, science should be able to offer an explanation of existential experiences such as those sketched in Section I above by revealing what happens in my brain. This is true for falling in love. But it is also true for faith.

Even our perceptions of *immanent* reality are products of our brains. To bring about such perceptions, the brain had to process information coming from elsewhere. To become real for me, therefore, God would have to provide information through some channel or other that my brain could process, say the proclamation of a preacher, or the life of a fellowship of believers. And indeed, that is what happened in my case and what the biblical authors believe *must* happen for us to have an appropriate notion of God (e.g. Rom. 10:14-17; Deut. 6:1-9).

God's intentionality and agency are transcendent. They do not override, bypass, augment, or cooperate with immanent reality, but create it, empower it, and work through it. Once I realised that, I became curious of how God goes about producing and sustaining my faith in my brain. Visiting the workshop of developmental psychologists, I could not help but be drawn into their discussion.

Am I sufficiently competent to enter into dialogue with them? Hardly! Yet I know faith experience from within. I may have something to say about the adequacy of the analyses of those who know it only from the outside. Therefore my reconstruction of what happened in my brain when I came to believe in God deviates from main stream developmental psychology in important respects. Let me move step by step.

## 1. The womb

The first question is where in the life of a human being we must begin. Some developmental psychologists assume that the groundwork for faith in God is laid by the experience of one's mother in early infancy.<sup>16</sup> But the implicit experience of the unborn foetus is, I believe, more foundational for its mental development.

I take it that the hard-wiring of our brains began to take shape in the highly congenial situation inside our mother's womb. Here we experienced a near-ideal situation. We were protected, fed, drained and kept warm. Nothing was demanded of us; everything was provided for us. We unfolded according to our innate potentialities.<sup>17</sup>

Our relationship with this overarching canopy was so intimate that we could take it for granted as much as a fish takes the ocean in which it swims for granted. It must have been our most original and our most foundational mental conditioning, created in the hazy, pre-conscious phase of our lives, thus deeply tucked away in our subconscious.

Birth may be the most shattering experience to which any human being is exposed. The passage into the outside world is unbearably tight and oppressive. At the end of it, the paradise of the womb is gone. We seem to suffocate unless we breathe. We seem to starve unless we suck. We no longer float effortlessly in the womb; we are wrapped up in uncomfortable textiles and handled by coarse and often

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<sup>16</sup> In what follows, I am referring specifically to M. D. Faber, *The Psychological Roots of Religious Beliefs: Searching for Angels and the Parent-God*. Amherst, NY: Prometheus Books, 2004.

<sup>17</sup> Of course, I am assuming an ideal situation. Without any doubt, the foetus can be severely affected by drug-addiction, ill-health, stress level, and lifestyle of the mother.

less than empathetic hands. The infant is exposed to a cold, bright, totally unfamiliar and frightening world.

At birth the faculties of consciousness may not be sufficiently developed to fathom these experiences. That may be the reason why they cannot be remembered by adults. But these experiences must have laid down certain rudimentary synaptic structures in the brain regardless, and these structures continue to influence our subconscious. The submerged memory of what reality *ought* to be, as experienced in the womb, is superseded by the post-natal experience of what reality *ought not* to be.

## 2. Mother as care-giver

It is only now that the infant is confronted with ‘Mother’ as an external reality. To indicate the gradually and indelibly internalised notion of the empirical mother, I capitalise this term in what follows. For the first time in life, the infant experiences need—hunger, thirst, cold, discomfort—and responds to this experience by crying. As a result, the warm body, the breasts and the milk of Mother become available. Nappies are changed, the blanket is pulled up, the light is switched off.

Subconsciously, the experience of being exposed to needs one cannot fulfil on one’s own, and the concomitant sense of dependence on some powerful outside agent, becomes part of the entrenched hard-wiring of the brain. Assuming that God is a name for an omnipotent and benevolent Provider and Caregiver, psychologists believe this to be the mental structure that accounts for our God consciousness.

At that stage, Mother is ‘God’. At the same time, however, the infant discovers that screaming brings about comfort and care. It *can* do something about a situation, and it *has* to do something if relief is to happen. The cry-response pattern repeats itself again and again, suggesting something like a causal mechanism: crying delivers the goods. Again and again, it is reinforced by the availability of Mother as the provider of food, warmth, drainage and comfort.

A sense of reliability ensues. Subconsciously, the infant has discovered a post-natal source of life and well-being and the brain is hard-wired accordingly. Developmental psychology may take this to be the synaptic infrastructure for what may later manifest itself as prayer. But prayer is personal, and we are not there as yet!

Moreover, a fundamental difference exists between the subconscious experience of the whole in the womb and the early perception of Mother. Even if at that stage the infant may not be able to fathom the meaning of a divided world, Mother no longer constitutes the all-encompassing environment that the foetus experienced in the womb.

While she may be the most significant part of external reality, she has become an ‘other’—a part of a far greater universe, alongside the self and an increasing array of other such parts. Mother is not always available; she does not always react in the expected ways; she does not only act in terms of service delivery.

What then is primary—the experience of an all-encompassing and all-providing womb or the experience of a somewhat fickle substitute, the maternal care-giver? I

want to suggest that the sense of being embedded in a greater ‘benevolent’ whole, the womb, is constitutive for our God consciousness, rather than Mother as care-provider.

If the God-concept really got stuck in its fixation on Mother as a care-giver, God would be perceived as a ‘supernatural’ part of immanent reality among other such parts—a provider, a helper in need, a comforter, perhaps—but that is hardly an appropriate basis for God consciousness. What psychologists believe to be the essence of faith in God may actually be an infantile leftover that can and must be transcended towards something more fundamental.

### 3. Mother’s face

However, the ‘whole’ experienced in the womb has no face. Nor has the new, bewildering and threatening environment the infant encounters after birth. The moment the infant opens her eyes, she is exposed to the face of Mother. Within a relatively short time, this face becomes all-important. It radiates benevolence. It provides the reassurance that is so badly needed by an infant exposed to a precarious environment.

A dynamic interaction begins to develop between the facial expression of the child and the facial expressions of Mother. If the infant smiles, Mother smiles; if it frowns, Mother frowns, though certainly in a benign kind of way. Because Mother’s facial expressions and cooing words constantly respond to the initiatives of the infant and evoke the response of the infant, they act as a mirror of the evolving self, triggering and facilitating the process of self-recognition and identity.

At the same time, pointing to certain objects followed by spoken words triggers the development of symbolic representation, thus language. Verbal communication—the sending of distinct messages—begins to take place. Confronted with Mother’s face, the infant gradually becomes able to personalise the seemingly magical, yet unreliable, sequence of cause and effect described above. Through repeated and prolonged eye contact, the mysterious entity of another person impresses itself on the brain.

With that, another building block for faith in God has been laid in the subconscious. Mother has become a personal Other in a reciprocal relationship to one’s own being as a person and in contrast with the non-personal character of the overall environment. The impression of the personal is so powerful that, for some time, the growing child tends to personalise even impersonal objects and this tendency may endure into adult life.

The consciousness of God as a personal Other is, of course, fundamental for a Christian faith in God. The vague, all-encompassing environment of the womb has acquired a ‘face’, a distinct identity among others to which one can relate in personal terms. There is a reciprocal relationship between God as a personal Other and the human being as a person. In theological terms, God became a person for humans because humans are persons.

## 4. Normativity and authenticity

Psychologists tell us that it takes some time before an infant can sense the difference between self and Mother. Yet the discovery cannot be evaded. As we slowly awake to full consciousness, the post-natal environment demands alertness, intuitive integration of oncoming experiences and active responses.

Mother's reaction can be evoked. Toys can be manipulated. One can act and make an impact. Actions have consequences, some of which are rather unpleasant. One needs some kind of guidance in the discovery of which behaviour is beneficial and which is detrimental, which endears and which alienates.

Because of her perceived superiority, Mother becomes the yardstick for what can pass as an authentic self long before external cultural influences impart assumptions, values and norms. The attitude and behaviour of Mother and other handlers suggest a difference between what is acceptable and what is not acceptable. In its inescapable dependence, the infant experiences the terror of disapproval, anger, potential rejection and abandonment and badly needs to experience acceptance, forgiveness and reconciliation.

Initially, it may not be able to consolidate the difference between 'good Mother' and 'bad Mother' in the same person. This may be the synaptic foundation for the distinction between the 'wrath of God' and the 'love of God'; between Paul's concepts of 'law' and 'grace'; between Luther's concepts of the 'hidden God' and 'revealed God'; between God and 'the devil' in popular spirituality. It is important to note in this respect that grace (forgiving love) is the counterpoint to law (expectation of acceptable behaviour).

In time, it becomes clear that acceptance and belonging must be earned. One has to play by the rules, and the rules have to become 'second nature'. That is how 'conscience' is formed. The discrepancy between what ought to be and what ought not to be acquires an ethical quality. This may be the root of what psychologists call the 'superego'. With the emergence of normativity, intentionality and agency, the infant becomes a rudimentary ethical subject.

## 5. Beyond mother

After the womb and the trauma of birth, Mother may be the most fundamental internalisation 'hard-wired' into the brain of the infant. It is here that material provision, spiritual reassurance and ethical acceptability converge most intimately into a holistic experience. This synaptic 'circuitry' may form the neural infrastructure for a sense of reliability and predictability that can be trusted in the upheavals of life. It can consolidate into a sense of God as a Super-Mother, depicted as a divine Parent and Provider in developmental psychology.

As we go through childhood, adolescence and maturation, however, reality increasingly proves to be greater than Mother—infinately greater and infinitely more complex! While Mother may embrace, caress, feed and clean the infant, she

is an inadequate substitute for the womb. She is also too small, too fallible and too unreliable to act as an image for God in later times.

There is a greater beyond out there—a bewilderingly complex, open, unpredictable, threatening world. Is it hostile or benevolent? Are its sporadic and partial gifts and threats ultimate, or must they be transcended towards a higher, more comprehensive and more reliable benevolence? As the child reaches adolescence, such questions become pressing.

## 6. Separation

Paradoxically, the need for Mother to be around and protect the child implies that Mother is not all there is. The child begins to experiment with going beyond Mother, looking for possible alternatives, exploring its own potential power. In a rudimentary process of ‘separation’, the child shifts its affection and trust, at least partially, to something that is decidedly *not* Mother.

This is typically something that is under its own authority and control—a doll, or a teddy bear, or a blanket. It can also be a completely imaginary object or ‘pal’, with whom the child has extended discussions. Such an object is treated as if it were a person. Now the child ‘plays Mother’ by being in charge of something subordinate to its own will.

At a certain stage, the child tries to assert itself against the will of Mother with a display of resistance and stubbornness. Its own will power must be discovered and its limits must be fathomed. Once the self-identity of the child has been established, at least in rudimentary form, this phase may yield to a more cooperative attitude, at least for some time. Now Mother and child are two personalities, each with their own identity and dignity. In this phase, Mother can appeal to justice and reason, and the child may understand.

However, during puberty, the child’s earlier experimentation with emancipation morphs into a powerful thrust forward. The spiritual umbilical chord is finally severed. This is an unhappy but necessary phase in child-parent relationships. The role of the ‘significant other’ now shifts decidedly from parent to peer, film star, sports hero, or teacher. The message of this change of dependency is: I can choose my own ‘Mother’!

But I cannot choose my own God. Why not? The decisive reason is that, in our intuition, God represents the transcendent Source and Destiny of the *whole* of reality, even if we haven’t got the slightest clue of who or what God might actually be. It is the *content* of the notion of God that now becomes the decisive and most pressing question: Is God nothing but blind fate, an impersonal mechanism, an ocean of unpredictable dynamistic forces, a moody and demanding ancestor, a strict law-giver and judge, or a loving father?

God can only become compellingly real for us if God imposes God’s reality upon our consciousness. And that is a neurological process! In both science and faith, we cannot invent the ‘truth’. A ‘truth’ based on fantasy or logical construction will

not convince us. Truth happens when the synaptic networks that represent existing knowledge and new information fall into place.

What we experience as the ‘truth’—whether scientific or religious—is the picture of reality in our mind that is capable of integrating our genetic predisposition, our foetal and infant conditioning and our ongoing experience. It claims provisional validity because it reflects the character of the reality we have so far experienced. While it may be persuasive for the moment, the acquisition of ‘truth’ is, in both science and faith, a dynamic process. What we deem the truth is subject to constant critique, correction and expansion.

## **7. The autonomous self and the subordinate self**

An important bifurcation in personality types may take place at this stage. In some adolescents, the sense of competence and self-confidence grows to such an extent that they are able to appropriate the glories and dangers of emancipation and mastery. For them, reality is there to be subdued, transformed and utilised.

Adaptation and accommodation become mere strategies to enhance one’s power, rather than subjecting oneself to imposed imperatives. The risks of defeat, failure and pain are to be faced boldly and defiantly. The ego has become the centre of the world. It can do without the ‘crutches’ and ‘hypotheses’ of faith in God functioning as a super-parent.

Such emancipated individuals may not necessarily be capable of gaining and maintaining this courageous sovereignty. By the looks of it, most people become enslaved by multiple psychological and social forces—anxieties, resentments, desires, fancies, fads, peer pressures, heroes, role models, family loyalties, community expectations, professional duties, ideologies, social norms, the lures of the advertising and entertainment industries, and so on. The question arises how free the emancipated self actually is. We shall soon come back to that.

Other individuals retain a deep sense of derivation, dependence, vulnerability, mortality, obligation and accountability. Their world continues to be eccentric rather than egocentric. They cannot imagine life without the protective canopy, the fulfilment of expectations and the personal comfort of a benevolent Other who is ultimately in charge of reality. The early experience of the womb morphs into the notion of an all-encompassing embrace.

They are grateful for the chance of being alive and well. The obligation to respect, submit to, and serve ultimate authority remains paramount. Transgression and failure cause anxiety and restlessness. Emotional peace can only be restored through forgiveness, restitution and reconciliation.

It is not entirely surprising that women tend to be more religious than men. Their biological functions (menstruation, pregnancy, breast feeding, care of immature children) made them exceptionally vulnerable during prehistoric times, and evolution has conditioned them for a protected and dependent role.

## 8. Genuine freedom?

I do not think, though, that *true* faith manifests an infantile or dependent personality. On the contrary, because all relationships with oneself, others, the community, society and nature are superseded by the decisive relationship with the transcendent Source and Destiny of reality as a whole, a distance opens up between the ultimate and the proximate.

Now the world does not have the last word; God has. The greater embrace of God constitutes a freedom that cannot be obtained through the assumption of personal autonomy. Faith can develop a defiant attitude against ‘fate’, natural constraints and social conventions and pressures.

A sense of freedom *from* the world again makes a sense of responsibility *for* the world possible. The anxiety of losing out makes way for wanting to serve. The self is no longer the centre of reality. There is something more important than self-interest.

The bifurcation sketched above suggests that the development of a personal God-consciousness is not inevitable. There are people who seem to manage quite well on their own. They had indeed encountered Mother during infancy and childhood, yet an awareness of the transcendent seems to escape them. So it cannot be taken to be a necessary causal consequence of the infantile experience of Mother.

However, I doubt whether the sense of inadequacy, derivation, dependence, community, obligation and accountability can ever be completely erased from the subconscious. It is here that God consciousness has its earthly roots. As statistics show, many secularised people retain some kind of awareness of some greater Other. It is not based on pure fantasy. It does not represent the naïve personification of impersonal phenomena. The synaptic infrastructure underlying the sense of a personal Other is deeply rooted in the process of becoming a human person.

## 9. Mother and Father

We have now run ahead of ourselves. The synaptic infrastructure of God-consciousness is not only based on the experience of Mother, but on other relationships as well, notably that of Father. Of course, this depends on the kind of family in which the child grows up.

In an extended family, there are many mothers and fathers, with Granny sometimes playing a more fundamental role than Mother, and Uncle playing a more fundamental role than Father. In a defunct family, where the father has absconded, the mother is working or has died of AIDS, Granny or even an elder sibling may be the decisively significant Other.

In a healthy nuclear family, Mother and Father play distinct roles. While the experience of Mother may be more important for the development of the image of an ever-available, divine caregiver, the experience of Father may be more important for the development of an awareness of divine authority.

Simply by virtue of his strength, his no-nonsense attitude, his deep voice, his rougher handling of the infant, and his relative remoteness and infrequency, he tends to be experienced as a more demanding, less forgiving, less easily available, higher-placed authority. This is true even where traditional patriarchal relations have become more veiled and implicit.

Feminist indignation may be entirely justified under modern circumstances. But we have to ask why patriarchy became the universal norm in virtually all ancient cultures in the first place. Was that pure male chauvinism, subjugation and exploitation? A combination of biology and palaeontology may throw light on this phenomenon.

In prehistoric times, humans were exposed to dangers posed by wild animals, violent conflict and natural vicissitudes to a much greater degree than today. Only females could conceive, give birth and suckle the infants. So only females could make up for losses and replenish the human resources of the clan or tribe. Moreover, in contrast with other mammals, the human offspring is dependent on the mother for a very long time.

In contrast with males, therefore, females were absolutely indispensable. Yet they were much more vulnerable than males, especially during menstruation, pregnancy, birth and child rearing. Males were not only physically stronger, and that certainly for a reason, but also more dispensable than females. In a polygamous culture, a deceased father could easily be replaced by a male relative.

So the arrangement that made the male responsible for the outward defence of the homestead and the female for the quality of life within the homestead had evolutionary advantages. Before the domestication of animals, the male went out hunting and fighting, while the female went collecting berries and roots with her last-born child on her back. Of course, power can be abused for one's own ends and males have been particularly good at doing that.

It is no mystery, therefore, why male dominance entrenched itself in social institutions the world over. As Exodus 21:1-11 shows, women were virtually no different from slaves in ancient Israel. As social conditions change and allow the social system to become less patriarchal, sexism becomes less of an economic boon and more of a handicap. So discrimination against women becomes less acceptable.

What about God? In purely rational terms, the transcendent Source and Destiny of reality must, of course, be gender neutral. God is as much the Creator and Redeemer of the female as of the male. Following the tradition of Genesis 1:26-27, the human being must be deemed the 'image of God', whether male or female. What we are busy with, however, is not rationality but synaptic conditioning based on primeval experiences.

Under modern circumstances, the status difference between Father and Mother may be levelled out at least to some extent in the minds of children. However, one should not underestimate the power of differences in the primeval experience of Mother and Father in psychological terms. Their respective impacts on the subconscious of the child are simply dissimilar.

It is inappropriate, therefore, to reduce the formation of the synaptic infrastructure of God consciousness to the impact of Mother. It is also logically problematic to transfer God-consciousness from a human 'Mother' to a divine 'Parent'—as if there was something neutral like 'parent' in the experience of a child!

In no ways is the Father-God of faith the idealised version of maternal care and nothing more. In the Jewish-Christian-Muslim tradition, God is definitely perceived

in male terms. The association of the concept of God with overwhelming power and ultimate authority obviously suggested that God must be male, rather than female.

However, the female is certainly present for the child as an authority in her own right, even in a patriarchal society. Conversely, Father also has loving, caring, forgiving characteristics. So while the functions overlap, they are quite distinct.

### Mary, the ‘Mother of God’

It seems counter-intuitive from a developmental point of view that the roots of the Jewish-Christian faith did not foresee a divine Mother, as we find it in many other religions! Here we have only one God. This God is a person and the general human perception of a person does not seem to cater for a bisexual identity. Nor does the English language.

The traditional Father and Mother images in Christianity allow for some intriguing reflections concerning the development of the notion of Mary as a female co-saviour in the Catholic Church.<sup>18</sup> It is remarkable that she has become such an overwhelmingly important figure in a church that emphasizes male dominance more than any other, and which encompasses the vast majority of Christians in the world today.

As a male figure, Jesus was never likely to come across in typically ‘motherly’ terms. The image of ‘Jesus meek and mild’ just does not ring true. It is also biblically problematic, because Jesus of Nazareth was anything but a gentle pushover. His followers saw in him the *Kurios*, their Lord, and the Lord of the universe. He was perceived to be the messianic king, thus the representative of God on earth.

When Christianity became a state religion, emperors and popes claimed to be the earthly representatives of Christ, the heavenly Sovereign. Works of art depicted him in typically imperial, majestic terms, even when hanging on the cross. As ultimate authority, he was attributed the role of the Judge presiding over the last judgment. A depiction of the last judgment is found above the entrance to any medieval cathedral, reminding every entrant of whom they will be facing when the day of reckoning dawns.

In line with Psalm 2, but in stark contrast to the witness of the New Testament, therefore, Christ had become associated with military power, imperial authority, divine law, judgment and condemnation. ‘Grace’ was understood in Germanic terms as undeserved royal privilege granted to those singled out by the sovereign.

Representing a feudal authority, ostensibly installed and legitimated by celestial authority, the ecclesial hierarchy was the prime beneficiary of this feudal ‘grace’. It had the authority to dispense it downward, albeit in carefully measured quantities and only under definite and costly preconditions.

With the grace of God having become conditional on human achievement and excellent disposition, the terror of an eternity spent in the fires of hell excited the imagination of the sensitive. No wonder people began to yearn for the merciful, ever-loving, ever-helpful, ever-accessible Mother, to whom one could appeal in disease, distress and guilt.

Perhaps latching on to a popular goddess in the Ancient Near East<sup>19</sup>, Mary became the actual saviour figure for millions of people, while Jesus receded into the lofty and inaccessible sphere of God’s majesty. One only has to visit a series of Catholic cathedrals in Europe to sense the overwhelming importance of Mary in that Church.

In one of these monumental expressions of ecclesial glory, I found a chapel devoted to the crucified Christ. A single candle had been lit. I lit another one out of sheer sympathy. A similar chapel devoted to Mary displayed more than sixty candles! Moreover, devotees could express

<sup>18</sup> Because I am a Protestant, this is a risky undertaking. Let me emphasise, therefore, that the following considerations are made from the point of view of developmental psychology, rather than doctrinal controversy.

<sup>19</sup> The Greek goddess Artemis, equivalent to the Roman goddess Diana, represented both motherly care and spiritual (and physical) strength.

their personal concerns for her attention by writing them in a great book displayed next to the chapel. It contained hundreds of entries pleading Mary for help and mercy and thanking her for having heard and helped. Why did Jesus attract no such devotions?

The most likely explanation is that she is a Mother, while Jesus is not even a Father in the psychological sense of the word! If anything, he is the Lord, the Commander, the One who represents ultimate authority, who imposes discipline, who is to fear, rather than to get cosy with.

Mary has become the archetypically feminine also in other ways. She remains ever youthful; ever pure; ever beautiful; ever a virgin, even after having given birth; ever accepting her fate imposed by male authority. She is never depicted as an elderly woman, washing nappies, negotiating sibling conflicts, sweeping the floors, stressed out, tired, sick, frustrated, or angry.

Ironically, the Middle Ages also invented a feminine counter-type to Mary—the witch! Invariably, she was an old, fragile, worn-out, lonely, wrinkled and odd woman. She was socially marginalised because she had become unattractive, useless and unbearable. Her words had become bitter and irrational. Her mere existence caused embarrassment and expense to her offspring. She had to scavenge in the forest for food and found solace in her (black) cat.

The bedrock on which the figure of Mary rose to universal and eternal significance thus seems to be located in the need of the human psyche for a representation of perfect femininity in its youthful prime. Seen against the background of an essentially patriarchal system, the evolving Catholic doctrine about Mary seemingly only underpinned and legitimated the popular response to a fundamental psychological yearning.

Never mind that none of this is supported by the primary sources of the Christian faith in the Old or the New Testament. Taking all the various traditions about Mary in the New Testament into account, she seems to have played a rather ambiguous role. Never mind that the image is logically inconsistent—a virgin after having given birth; a human mother without a human husband; the mother of God (assuming that Christ was God), yet also of human children; a mother subservient to her son!

The idealisation of Mary began as early as the formation of the legends about the supernatural birth of Jesus in the Gospels of Matthew and Luke. In time, Mary acquired characteristics similar to those of the risen Christ. She was conceived without sin (as Jesus was); she became the ‘Mother of God’ (parallel to Jesus, the ‘Son of God’); she suffered as Jesus did (under the suffering and death of Jesus); she was raised from the dead before the general resurrection (as Christ was); she ascended to heaven (as Christ did); she was enthroned in heaven (as Christ was); she is acting as the advocate for the suffering and guilty (as Christ does); she is the intermediary between God and humankind (as Christ is); she is considered co-redemptrix (a redeemer acting in partnership with Christ, the Redeemer).

Having been raised to such a position of dignity and majesty, she became more prominent in spiritual terms than Christ is. She is often portrayed with a massive, glittering crown on her head. Protestants are indignant about this seemingly unscriptural and arbitrary ecclesial construct that has appropriated what should have belonged to Christ and Christ alone. But if there were no substance to its emergence and evolution, it would not have become so popular.

From a developmental perspective, one cannot help but ask whether she might not reflect the fundamental Christian message of the *benevolence* of the transcendent Source and Destiny of reality quite well, only this time in the guise of a *female* ideal type. When seen in purely psychological terms, she seems to fit God’s loving concern more adequately than her male counterpart. The notion of the ‘risen Christ’, seated at the right hand of God, is, after all, a similar ideal type, equally void of empirical and historical evidence, equally accepted in faith, but less ‘motherly’ because of his male gender.

Let me hasten to add that all this has no resonance in my spiritual universe. Perhaps because my faith was nurtured in a Lutheran context, Mary did not play the slightest role in my life. To think of God as a divine Mother was equally beyond my horizon. But even the Fatherhood of God was never a powerful notion in my spirituality. I thought of God simply as God. So let me resume the account of how my spirituality unfolded.

## 10. Christ, the elder brother

Apart from the primal images of Mother and Father, there is another constitutive image in the Christian faith—Christ, the Elder Brother, or expressed in gender neutral terms, the Elder Sibling. How does this image fit into the picture of developmental psychology?

Although I had a brother who was five years older and who had a profound impact on my psychological development, his role as a superior member of the family did not seem to impact my spirituality. My transcendent Other was God, the Father, plain and simple. God represented both ‘motherly’ love and ‘fatherly’ authority. I needed nothing more.

So for a long time I did not know what to make of Christ. By the looks of it, he was an imposing, smart and nice guy, but God was something else altogether. That changed when I was impacted by life-changing relationships within a Christian community, notably with two young missionaries. Slightly older than myself, they were still in their youthful prime.

Perhaps they picked up the synaptic infrastructure laid down by the experience of my elder brother during my childhood and filled it with content. Perhaps they became the catalysts for my sense of the presence of Christ in my life. They were neither Father nor Mother; they represented a human being just like me, but one through whom I encountered the transcendent Other in ‘his’ motherly love and ‘his’ fatherly authority.

With the tradition, I called Christ ‘Lord’. But the image was that of an empathic leader rather than a commander, a comrade rather than a chief. The relationship was based on freedom and commitment, rather than authority and pressure. Expressed in psychological terms, Christ was not a representation of my ‘super-ego’, but rather the reality of human authenticity in which I was called to participate, the ‘archetype of human wholeness’.

The Mother and Father of infancy did not figure in this relationship. In fact, Christ asserted himself against the claims of my earthly mother and father, who were less than pleased with the direction my life had taken. Mediated by youthful friendship and community, it was as if God had acquired a new and more congenial human face for me (2 Cor. 4:1-6).

## 11. The crossroads and the cross

It was not a divine Father or Mother, but Christ whom I encountered one night in an ecstatic experience when I was nineteen years of age. I was working on the farm of a distant relative in Namibia. The family was wealthy, secular, aloof and condescending. They were profoundly different from my youthful friends. I just did not seem to fit into their world. In some ways, I felt a deeper connection with the black workers on the farm than with my employers.

As I brooded over Deuteronomy 6:4-13 one evening, it struck me with an elementary force that my life too, with all its beauties, potentials and privileges, was a gift of God, which I had done nothing to achieve. I owed this life to God, and God was fully entitled to claim it for God's purposes. And indeed, the claim of God to my life followed.

The ecstasy itself was nothing dramatic—just the sense that Christ had joined me in my austere and lonely room with nothing but a Bible and a burning candle to catch my attention asking an almost implicit, never quite articulated, but inescapable question: Will you join me and become a missionary? I stood up and walked into the night as if I was in a dream.

My encounter with Christ was specific to my character, upbringing and social embeddedness. There is no question that the rather intimate relation I had with the black workers on the farm where I had grown up informed the content of my 'calling' to become a missionary among blacks, as did the deeply respectful way my missionary friend had dealt with his black congregants.

So the people whom I thought I was called to serve presented no problem to me. On the contrary, their social inferiority and material poverty prompted my sense of obligation. Yet I was totally overwhelmed by the prospect of having to break out of the career that had been mapped out for me. I was to study agriculture and take over my father's farm. The wealthy uncle mentioned above had promised to pay for my studies in Agriculture.

Moreover, with only a few exceptions, my family was thoroughly secular. My mother had worked in the household of a missionary as a teenager and had come to the conclusion that mission work was a tragic waste of time. As her last born, she was deeply attached to me. She had been very ambitious for my future and saw all her hopes dashed. It was clear that nobody would understand; nobody would approve—except my biological brother!

I dragged on without taking a decision for two years, but never found my peace. Finally, I decided to go into a week-long retreat and sort out my life. The moment I began to pray, however, it was as if a voiceless voice spoke to me saying: Why are you playing the fool? You do not want to come and join me anyway! That is when I broke down and yielded.

I secretly hoped that God just wanted to test my sincerity as he tested that of Abraham when he asked him to sacrifice Isaac. But that kind of reprieve never came. The call was for real. It sent my entire subsequent life into a different direction. I did not immediately put my decision into practice, but completed my studies and began working as an agricultural officer in the South African Department of Native Affairs.

Extracting myself from the expectations of my father, mother and larger family, giving up the farm that I deeply loved, and letting go what promised to become a great career as an agricultural economist in a government department was a depressing exercise. Beginning with a new, long and tedious theological education as a married man and a professional at a rather mature age was traumatic.

Yet I never looked back. I had found my authentic self and would have forfeited my integrity if I had succumbed. In the decades that followed, I never got rid of my innate feeling of inadequacy and failure, but it was my sense of a divine calling,

rather than God's forgiveness, that carried me through all predicaments, afflictions and temptations.

The calling of Peter in John 21 suggests a similar situation. Here divine forgiveness was the *implication* of a divine calling, rather than the other way round. For me, the cross of Christ signifies God's suffering, transforming acceptance of the unacceptable, as manifest in the suffering of his earthly representative.

So where does this leave me in terms of developmental psychology? Even if he knew every detail of my foetal, infant and adolescent past, even my cultural background and religious socialisation, no psychologist could have guessed that my life would take this direction!

Nor was my experience particularly unusual. The Bible and the history of the church are replete with similar instances. The approach of conventional developmental psychology clearly seems to be an inadequate tool to explain in immanent terms what had happened in all these cases.

I will avoid jumping too readily to the conclusion that this was a clear case of direct divine intervention in my life. As the transcendent Source and Destiny of reality, God acts *through* God's creation, that is, through immanent reality, rather than bypassing it. So there seems to be a missing component in this explanation somewhere. What could it be?

There is another reason why we should be wary of jumping to conclusions. There are instances where believers (Jews, Christians, Muslims, Marxists, Nationalists) are 'called' to commit the most horrific atrocities. There were the Japanese Kamikaze pilots who crashed their aircraft filled with deadly cargoes onto enemy vessels. During the heyday of apartheid a young white Christian received the divine instruction to shoot and kill a substantial number of blacks on a commuter bus! I scarcely have to mention the epidemic of suicide bombing that has gripped parts of the Muslim world in recent times.

So the prime consideration when judging the validity of ostensibly divine revelations and instructions should be whether their character and content reflect God's vision of comprehensive optimal well-being. This lays a rather heavy responsibility on the professional theologian! Before I come to that, however, I have to highlight, once more, two other facets of faith in Christ.

## 12. God—a sense of the whole

I have defined God as the transcendent Source and Destiny of reality as a whole. The creative power of God is experienced in ordinary life, while the benevolent intentionality of God is proclaimed, believed and enacted on the basis of an evolving tradition. The latter found its pivotal centre in Christ, deemed the representative of God on earth.

Both the impact of empirical reality and the impact of a spiritual message on our consciousness are immediate experiences. But the interpretation of both as 'being of God' is based on a third, more implicit aspect of God consciousness—the intuition of

the existence of a dynamically evolving, yet all-encompassing truth. Where does that fit into developmental psychology?

Faith intuitively assumes the existence of a kind of meta-consciousness that encompasses reality as a whole both as it really is and as it really ought to be. This intuited comprehensive truth of reality, known only by God, stands in stark contrast to our feeble glimpses and truncated perceptions of reality.

This intuition surfaces in biblical formulations such as ‘before the foundation of the world’ (Eph. 1:4), ‘all things’ (Eph. 1:10, 21-22; Col. 1:16-20), ‘being formed in the mother’s womb’ (Ps. 139:13), ‘he counts all my steps’ (Job 31:4), as well as the countless expectations of a comprehensively wholesome future.

It undergirds statements about divine ‘wisdom’ or ‘rationality’ as the primeval instrument of God’s creative activity or God’s ultimate plan (Prov. 8:22-31; Sirach 1:9 ff; Wisdom of Solomon 7:22ff; Eph. 1:7, 3:9f; John 1:1ff). It surfaces in the expectation to see God ‘from face to face’ (1 Cor 13:12).

There seems to be a psychological need for such a vision of the whole. Primeval religions sometimes struggle with uncertainty about whether the sun will rise again tomorrow, whether rain will fall, or whether the sea can go beyond its borders and flood the earth. They deem it prudent to stabilise their life worlds with appropriate rituals. This may have been one of the roots of the concept of a benevolent and reliable God who has ‘laid the foundations of the earth’ and who ‘sets the boundaries of the sea’, which is an ancient metaphor for chaos (Ps. 104:5-9; Job 38:1-10).

God consciousness grants a sense of stability, orientation and validity without which one feels like being tossed about in an ocean of relativity and uncertainty. It provides an implicit system of coordinates, a frame of reference, an overall coherence that science attributes to natural law. But according to the biblical faith, natural law is the law of God!

Although we have no way of fathoming its dimensions, a sense of the existence and reliability of reality as a whole is foundational, even for our times. How did this assumption of an all-encompassing ‘truth’ get into our brain? Again it was the womb that provided the protective and sustaining canopy of life. This great Other was omnipresent, all-inclusive and adequate in all respects. Nothing stuck out; nothing was lacking; no problems surfaced.

Because it was not consciously experienced as such, it could simply be taken for granted. But whatever can be taken for granted is implicitly present. All reassurances and demands subsequent to our births turned out to be partial, conditional, fallible and unreliable. They could not fully compensate for the loss of an all-encompassing embrace.

So the experience of the womb may have laid down the basic synaptic infrastructure for the intuition of a transcendent Source and Destiny of reality. Under the impact of the proclaimed ‘Word of God’, it may then have morphed into the Jewish-Christian notion of God, the mainspring not only of one’s naked existence and the existence of one’s entire life world, but also of its meaning, identity, acceptance, belonging, guidance and vision.

The notion of God indeed mirrors the highly integrated situation in the womb. The foetus and the womb are distinct, but not separate. Separation occurs at birth, and on a higher level during puberty, but this separation is a separation from the

*earthly* parent, not from God. One cannot abstract oneself from the presence of God, because God is the precondition of one's very existence.

The dialectic between amalgamation and separation is typical for inner worldly relationships. Parents, sweethearts and life worlds operate at the same level with the self; God does not. Our relationships to them are horizontal; our relationship with God is vertical. We can absent ourselves from their presence, but we can never be separated from God without losing our existence.

### 13. Paradise lost—going back to the future

Whether dependent or emancipated, we never attain a fully authentic life in a totally satisfactory life world. Therefore we never seem to outgrow the subconscious desire to return to the mother's womb, enriched and potentiated by the subsequent experience of the significant Other as a personal counterpart. The hidden memory of these experiences provides a sort of subliminal Garden of Eden.

However, we cannot retrieve the past. Time relentlessly moves forward. What happened in the past continues to determine the present, but what had been very real then is now gone forever. What ought to become can only be expected from the future. But the *criterion* of a wholesome future—comprehensive optimal well-being—has been defined by the womb as the absence of need, suffering, alienation and conflict.

That may be why we are constantly confronted with an awareness of the inadequacy of ourselves and the world in which we are embedded. Our hormone system renders any deprivation unpleasant. We are constantly challenged and prompted to move forward in the direction of a vision of what we and our life worlds ought to become, however fickle and feeble it may be. The present is pregnant with a range of luring potentials that want to be realised, that call for our attention and intention, our evaluation, decision and action.

Some of these potentials may be superficial, trivial, partial, short-term, egoistic and misleading. We are challenged to gain greater profundity and wider horizons, to see ourselves within the concentric contexts that make up the world in which we are embedded: the body, the community, society, humanity, nature, the earth, the solar system and the universe as a whole. Potentially, at least, there always seems to be a greater womb ahead of us that promises to engulf a far greater whole in a state of comprehensive well-being.

Our inability to achieve the ideal state of the womb can be considered part of the scientific explanation of the theological concept of 'original sin'. Though we may be doing our best, we will never reach the comprehensive optimal well-being of our life worlds, as defined by the womb. We are disillusioned; we feel cheated; we experience ourselves as failures. This criterion again implies that our brains are hard-wired to crave for wholeness, forgiveness, reconciliation, acceptance and belonging.

Christ is the prototype of the authentic human being. But our experience at the human level becomes decisive for our vision of the cosmic whole. God, the transcendent Destiny of reality, lures us into God's future. God's vision

of comprehensive optimal well-being affords us a foretaste of the ultimate womb—constantly advancing ahead of us as we move through our lives, and ever opening up new vistas, challenges and opportunities.

## 14. The transcendent does not replace the immanent

Before we move on, I need to underpin my impression that developmental psychology does not capture the essence of Christian God consciousness to a satisfactory extent by sharing an important observation. The images that our subconscious internalises when we are confronted with immanent reality may provide us with a basic frame of reference, as it were, but this structure does not seem to suffice for a consciousness of the transcendent Source and Destiny of reality as a whole. Let me demonstrate.

1. *Mother.* As mentioned above, it is simply not true that the experience of Mother as a perpetually available earthly provider is transferred seamlessly into the experience of a divine Provider-Parent. My own faith experience bears that out.

It may well be that I fell for my sweetheart some sixty years ago because my subconscious recognised a fresh, youthful, attractive, and in many ways more congenial incarnation of my mother in her. The resemblance of my fiancé to my mother was so striking that she was occasionally mistaken as her daughter. This impression was particularly powerful because, at the time, my adolescent detachment from my earthly and middle-aged mother included the detachment of my evolving spirituality from her rather secular mindset.

The point is, however, that my faith in *God* at the time did not obviate my need for an alternative *human* Mother figure. Nor was my perception of God particularly motherly. Nor did my future wife represent a motherly Provider. There is a clear disjuncture here.

2. *Brother.* A similar observation concerns my relation to Christ as a transcendent Brother figure as spelt out above. I was born five years after my elder brother. From earliest childhood, there has always been a sibling around who was superior to me in terms of maturity, competence and strength.

The result was that throughout my life, I saw big brothers in my peers to whom I tended to ‘look up’, even when they were much younger, less senior in rank and less experienced than I was. That continued far into my adult life, in fact almost up to my retirement.

The point is, again, that my relationship with Christ did not obviate the unfulfilled psychological need created by the presence of my earthly brother. Again, there is a clear disjuncture.

3. *Father.* Due to the war, I had to do without my father’s presence between the ages of seven and seventeen. In a certain way, this deprived me of a male role model during adolescence, when I needed it most. As a result, my subconscious was constantly on the lookout for a compensatory Father figure in my social environment: my teachers, my professors at university, or my superiors at work.

Towards the end of my studies, I had found what my subconscious must have recognised as a paternal ideal-type. He was a remarkable German professor of theology who fascinated his students. I attended his lectures scrupulously; he appointed me as his graduate assistant and supervised my doctoral thesis.

To my own embarrassment, I discovered many years later, when it was my turn to lecture German students, that I imitated his style. The point is, once again, that my faith in *God* did not obviate the need for an *earthly* Father figure.

4. *Authority*. As mentioned above, I was the youngest in the family. As a result, I was much more submissive, dependent on acceptance and sensitive to non-acceptance than my elder brother was. Not having many options, I gained the special attention of my mother by playing the weak and vulnerable, thus becoming a whining and complaining type.

I did my best to meet the expectations of whoever seemed to have authority over me. I was also indignant when others did not play by the rules, thus displaying a legalistic mindset. I was never a ‘good sport’. I was mortally afraid of the judgment of my teachers and lecturers. To outshine others and gain their approval, I worked hard and meticulously.

As an adult, I craved public recognition. To be overlooked hurt me deeply. I often withdrew into my shell to avoid painful challenges. The point is, again, that the *transcendent* authority I believed in did not simply take the place of the *earthly* authority I feared and tried to satisfy.

It would appear that I needed a higher authority that reassured me when earthly authority questioned my acceptability and belonging. It also kept me on my toes when tempted to succumb to the expectations of peers and superiors.

It is this distance that made it possible for me to maintain a sense of relative freedom from my social environment and responsibility for this environment. This was critically important in the apartheid conflicts. I was never able to swim with the crowd—whether on the white or the black side of the fray.

All this shows, I think, that the neat identification of God-consciousness with the synaptic structures laid down by our experiences of Mother, Father and Elder Brother is flawed. There is no smooth transition from the immanent level to the transcendent level. God is something more than, and something different from, a divine Parent. God consciousness is located at a higher level of emergence. It also has a different content. That brings us to the next section.

## Section III

### ‘True’ faith in terms of the Christian conviction

I accept the neurological proposition that nothing in our subconscious or conscious minds can do without a neural infrastructure formed in our biological brains through the development of synaptic networks. In the previous sections, I sketched the possible origins of the synaptic infrastructure for God-consciousness in our brains.

But can our God-consciousness really be reduced to our impressions as foetuses, infants and adolescents? It should be clear by now that the ‘nothing but’ argument is reductionist. It is also typical for the naturalist explanation of faith. The neural infrastructure and the actual content of our God-consciousness cannot be collapsed into one.

God consciousness is a new level of emergence that is more than, and different from, the network of neurons that underpins it. The synaptic infrastructures in our minds can display an indefinite number of shapes and directions, from the most elementary to the most sophisticated, from the most wayward to the most appropriate.

The formal ‘reality’ of God-consciousness as explored by science and the ‘truth’ of a particular kind of God-consciousness proclaimed by faith are two things altogether. They are complementary but different. What is it that constitutes ‘true’ faith according to basic Christian convictions, in contradistinction with ‘real’ faith as explored by science?

## 1. The substantive content of God-consciousness

God-consciousness is based on a profound intuition that what we experience is not all there is. Long sweeps of historical experiences and their interpretations over many generations have led to divergent conceptualisations of what the transcendent might be. They have widely different existential and social consequences.

In ancient Israel, God was not addressed as Father, but as the God of the fathers of Israel, Abraham, Isaac and Jacob; the God who delivered the Israelites from Egyptian slavery, who granted an exclusive covenant to them at Mount Sinai, who gave them the law, who led them through the desert, who gave them the land. It is the God who appointed their king, who held them accountable, who punished their transgressions, who led them into Babylonian exile, who allowed them to return and rebuild Jerusalem as the centre of the dispersed nation. God—that was the sacred, ongoing narrative of a foundational relationship!

So for the Israelite believer, God is much more than a divine Womb, Mother, Father, or Brother. God is the Source and Destiny of reality as a whole, who has condescended and established a relationship with ‘God’s people’. God is not necessarily experienced as the always available and trustworthy Provider. God is also not experienced as present at all times. The Israelite God can be silent, absent, hidden, or seemingly indifferent.

If we perceive God as an always present and always helpful Provider, this may very well be an indication that our faith in God got stuck in our infantile past. A mature faith is more realistic than that. God-consciousness can be quite contradictory to the propensities laid down by foetal, infant, childhood and adolescent conditioning.

In fact, the experience of the ‘absence’ of God, or the ‘wrath’ of God, is typical for the biblical faith. The Psalms, which reflect Israelite-Jewish spirituality, are particularly vocal on this point. They appeal to the sacred narrative of God’s past actions on Israel’s behalf. They proclaim God’s benevolent presence *in the face of* their current failures and predicaments.

They believe in God’s redemptive commitment to Israel against all evidence to the contrary. Believers are both *afflicted* and *reassured* in their affliction that God is with them and for them and not against them. In short, it is the *content* of God-consciousness that constitutes the Israelite faith, rather than a synaptic infrastructure based on infantile experiences, which most humans may have in common.

In the Christian faith, the contradictory character of God consciousness has taken shape in the prototypical image of Jesus of Nazareth as the ‘*crucified* Christ’. He, and no other, is the

messianic representative of God on earth. We shall come to that in chapter 9. Here, it suffices to reiterate that God is notoriously *not* the always available Caregiver, the always loving Mother, the always protective Father, the always reliable Buddy-Brother.

God—that is the terrifying Creator of the immense and highly ambiguous cosmic reality we experience. Christ—that is the amazingly gifted and miserably *crucified* Messiah! Unsurpassable majesty and the pathetic failure—these are the parameters of a genuine Christian God-consciousness.

God's creative power and redeeming love are *proclaimed*, and this proclamation may fall on fertile soil in our subconscious. Or it may not. Symbolic representations emanating from the vast pool of collectively held certainties constantly move from individual consciousness to individual consciousness through language, attitude, body language, ritual and ethical enactment. These factors give substance to a psychological propensity that might be there. But this propensity needs to be activated and filled with content.

The proclamation of God's foundational power and presence, God's judgment and God's grace can trigger the development of a keen God-consciousness, even where the early history of the individual or the community militated against it. What seems to matter is the encounter with the possibility of attaining one's personal authenticity in a close relationship with God in 'his' benevolent intentionality.

The corollary of this offer is the frightening possibility of losing one's authenticity by trying to become what one cannot possibly be: the autonomous creator, owner and master of one's life and one's life world. There is something like 'true conversion' or 'spiritual rebirth', when one is confronted with what seems to be one's authentic self in relation to the ultimate reality or God.

## 2. Authentic life

If you have been able to follow me so far, you must have realised that the expression 'children of God', as used in the New Testament, reflects something more than, and something different from, childlike dependence on a great Provider-Parent. Believers in Christ are fellow sons and daughters of Christ, the Son of God.

In fact, 'Son of God' is a royal title that reflects a position of authority and responsibility, the position of mature, dependable, motivated and dedicated adults. Sons and daughters of God are those who have been entrusted with responsibility for their own lives, their life worlds and the wider contexts of God's world as far as their mandate and influence reach.

This is not a slavish kind of obedience to the pre-formulated code of a divine Law-Giver, the observance of rituals that you believe a strict Father God demands of you, or the attempt to please a great Mother. Quite the contrary—you are motivated by your own authorised and accountable intentionality, leading to your own decision making and action. Human intentionality and agency are aroused and empowered by God's intentionality and agency working through the psychological faculties God has

created. Faith means living in the liberating, transforming and empowering presence of God.

According to the biblical tradition, authentic life is a life in which God's intentionality and agency manifest themselves in and through human individuals and communities. They are meant to be participants in God's creative and redemptive project in God's world. Within their human constraints, they are meant to become concrete, living instruments of God's intentionality.

God thinks through their thoughts, speaks through their words, and acts through their actions. Note how Paul applies this thought to himself in 1 Corinthians 3:5 ff and 2 Corinthians 5:20, 6:1. In John 15:1-12, the metaphor of the vine and the branches is used to express the same kind of relationship.

### **3. The negative foil**

Human beings are notoriously incapable of being genuine representatives of God. They want to be their own masters, whether they are entitled to such a status or not. They want to satisfy their own desires, whether these bring them true satisfaction or not. They want to pursue their own interests, whether this goes at the expense of the interests of others or not.

They are not free from the world entrusted to their care, but enslaved by it. They do not feel responsible for the world entrusted to their care, but only to themselves, or to lesser powers that impose their authority on them. Humans want to be autonomous and self-sufficient 'like God'. And, of course, believers are also humans!

As we shall see in chapter 8, there are neurological reasons for this phenomenon. They are universal. They are expressed in the myth of the fall into sin found in Genesis 2 and many similar narratives the world over. This also shows why faith in Christ is something more than, and something different from, mere self-recognition in the mirror of Mother's face during infancy.

The authentic self that Christ represents, in which we are invited to participate, uproots and replaces the empirical self in a process of constant confrontation and transformation. Or as Paul formulated it, dying with Christ to the flesh, we are enabled to participate in the authentic life of the 'risen Christ'.

Unrestricted freedom, autonomy, mastery, ownership and entitlement have become the unquestioned aspirations of modernity. The consequences are not reassuring. More than ever before, we need true representatives of God on earth, who share God's vision of comprehensive optimal well-being and who participate in God's creative and redemptive project in the world.

### **4. Justification—the substantive core of the Christian faith**

What happened to us as a foetus, infant, child and adolescent may have provided the synaptic structure for our consciousness of God. Yet the concept of a personal God as Provider and nothing more may be an infantile and inappropriate left-over of

a phase in life that we should have left behind when facing the realities of human life as adults.

For the mature believer an irreversible separation has occurred between Mother and Father on the one hand, and the presence of a transcendent Source and Destiny of reality on the other. God is infinitely greater, more fundamental, more complex and more inaccessible than the great Parent.

For the life of me I could not imagine a face when I think of God. In fact, there is simply no God out there whose presence and character we could lay our hands or our imagination on. Even Christ, by virtue of having been a concrete human being, has found countless artistic representations.

The experience underlying our consciousness of God is *indirect*. We experience *ourselves* as derived, dependent, maintained, yet vulnerable, mortal, accountable and culpable beings. We are consciously or subconsciously afflicted by fundamental anxieties about the meaning of our lives, our identity, our acceptability, our belonging, our right to be what we are, our authority to do what we do.

We constantly need to justify ourselves, to assert ourselves, to prove that we are significant and indispensable, to bolster our image and reputation, to show off our wealth, to demonstrate our excellence, to outcompete our peers. Where we fail to make an impression, where we are overlooked, shunned, or not needed, we are thoroughly miserable.

The vulnerability of our sense of acceptability and belonging shows up in full force when existential crises hit us. What if we fail an examination, are abandoned by a lover, lose our job, go bankrupt, become senile, useless and unwanted in old age? What if our family rejects us because we have contracted HIV-AIDS? What if we are condemned of a crime and end up in prison?

Our achievements and social standing are no foundation on which to build our lives. We need someone who transcends the contempt and hostility of our adversaries, and the unreliable respect of our relatives, colleagues and peers. We need someone whose judgment is unquestionably valid, who accepts us in spite of our failures, who is capable of reassuring us when we are hit by a meaningless fate, or by blatant guilt.

Our right of existence is our most profound need, our 'ultimate concern', as Paul Tillich called it. We instinctively feel that it depends on being what we are meant to be, that is, the authenticity of our lives. We do not manage to reach this authenticity. We may not even know what it might be. That is why the *content* of our God consciousness is so critically important. Convictions do not all provide satisfactory answers to the most basic of all questions.

Is God an imaginary personal friend who consoles us when we fail or suffer? Is God the spiritual fortress of an ethnic group, nation, class or race? Is God blind fate, or an impersonal mechanism? Is God a law-giver and judge and nothing more? Does God demand human authenticity without granting it? Are those who fail, rejected, judged and condemned? Is God a dark cloud hanging over our heads and our life worlds, or a loving embrace?

Only when we contemplate these questions do we begin to appreciate what Jesus of Nazareth has meant to the first believers and to those reached by his message of redeeming love ever since.

**Reader reaction**

Does the realisation that faith happens in our brains question its divine origin, seriousness and validity?

Which of my contentions can you confirm, critique or augment?

Would you be able and willing to subject your own faith experience (or lack of it) to a similar psychological analysis?

How would you summarise my stance and your response for a high school student?

**Let us summarise**

In this book, I argue that scientific explanations do not undermine our faith in God, but can be used by God to update, enrich and empower this faith. The previous chapter dealt with the biblical tradition as the ‘objective’ dimension of the Christian faith. The current chapter focused on the ‘subjective’ dimension of this faith.

I began with highlighting the difference between *belief* as uncommitted assent to a proposition and *faith* as conviction, trust and commitment. Because faith is intensely personal, I shared my own faith experience. I then analysed this experience in terms of a model used by developmental psychology to explain the manifestations of God-consciousness.

Based on neural-synaptic infrastructures, faith in God seems to reflect the psychological conditioning humans undergo during the earliest stages of life. In this regard, I developed a more comprehensive model than that of a maternal caregiver.

I argued that hard-wiring of the brain begins with the subconscious experience of the womb. After birth, Mother, Father and elder Sibling may enter as prototypical images. Mother’s face is critical for the development of self-consciousness. Motherly expectations, Fatherly authority and Brotherly leadership are critical for the emergence of a sense of normativity and accountability.

However, being a fallible part of a larger world, Mother is not experienced as a substitute for the womb. In early childhood, the child experiments with going beyond Mother and ‘play Mother’. Then it breaks with Mother (and Father) during adolescence.

At that stage, some individuals are confident enough to choose personal autonomy; others maintain a sense of derivation from, dependence on, and accountability to a higher authority. Paradoxically, the latter may lead to a more genuine kind of freedom and responsibility than the former.

In the Christian case, the ‘lost paradise’ of the womb, and the prototypical images of Mother, Father and Elder Brother may make essential contributions to God-consciousness. However, these images are insufficient to explain Christian God-consciousness.

What matters is the *kind* of contents that emerges and evolves in our consciousness through the impact of the proclamation, communal enactment and vision of the Christian tradition.

This content is based on the message of God's suffering, transforming acceptance of the unacceptable, as manifest in the history of Israel and culminating in the Christ event. It offers authentic life, defined as participation in God's creative power, sacrificial intentionality and comprehensive vision for reality as a whole.

Under the impact of the biblical message, authentic life, a life centred on God's project for reality as a whole, constantly strains to overcome our inauthentic life, which is centred on our personal and collective self-interest.

# 7

## The ‘real’ God of science and the ‘true’ God of faith

### Reader reflection

Do you believe that God is the ultimate Source of the very reality that we experience and that the sciences explore as such and as a whole?

If so, is the Christian assertion that this God is unquestionably benevolent not rather far-fetched, especially considering the ambiguity of the reality we experience?

If God intervenes in reality on our behalf, does God act as a factor *among* other such factors within immanent reality, does God work *through* these factors, or does God *suspend* the operation of these factors?

### What this chapter is all about

In chapter 5, we looked at the foundational documents of the biblical faith, its ‘objective’ manifestations as it were, from a historical-critical perspective. In chapter 6, we interpreted the ‘subjective’ experience of this faith in terms of developmental psychology.

We are now ready to analyse major assertions of the Christian faith on (a) God, (b) the human being, (c) Christ as the messianic representative of God, (d) his continued presence in the ‘Spirit’, and (e) the future that we can expect in terms of the ‘reality’ exposed by science, and the future that we should aim at in terms of the ‘truth’ proclaimed by faith.

In this chapter, we deal with the first aspect, the ‘reality of God’ as encountered in God’s creation and explored by science, and the ‘truth of God’ as proclaimed by faith.<sup>20</sup> The relation between the two is dialectical. It does not indicate contradiction, but complementarity.

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<sup>20</sup> Martin Luther’s theology provides us with the helpful distinction: the ‘hidden God’ of experience discloses God’s *creative power* but hides God’s benevolent intention, while the ‘revealed God’ of faith discloses God’s *benevolent intention* in the cross of Christ, but hides God’s creative power. Faith is an obstinate *trust* in God’s benevolent intentions in the face of all experiences to the contrary. Klaus Nürnberger, *Regaining Sanity for the Earth*. London: Xlibris/Pietermaritzburg: Cluster Publications, 2011, chapter 11.

Once one assumes that God is the transcendent Source and Destiny of the very reality explored by the sciences, *scientific statements turn into theological statements*. Expressed in theological terms, science deals with the world as the *creation* of God; faith deals with the divine *intention* underlying the created world.

## Section I

### God's creative power as revealed by science

Once we dare to speak of God in modern times, we enter into the vibrant debate on how our physical universe has been, and is being constructed. Does it just evolve on its own, which is the naturalist position, or has it been 'designed' by some mastermind as creationists assume?

Or must God be conceived of as the transcendent Source and Destiny of the whole of reality, just as it happens to be, however it might have emerged and evolved, and however it may continue to function?

This would include the basic parameters of time, space, energy and regularity that determine the nature of a wonderfully organised universe. This is the stance that I believe comes closest to the biblical witness and that I will take in what follows.

'Design' is an anthropomorphic metaphor that is not necessarily appropriate as an expression of what we mean when we speak of a transcendent Source and Destiny of reality. Of course, we are free to think of God as some kind of master mind or engineer, who in 'his' immense wisdom uses sophisticated procedures to design the world. Why not? We cannot help but express what we believe about God in metaphors taken from human experience. As long as we then identify these 'sophisticated procedures' with what actually happens in quantum physics, biological evolution and the neurological structures of the brain.

But many believers cannot distinguish between the intended meaning of the biblical message and its ancient packaging. Taking whatever is found in the Bible as a revelation of God's eternal truth, they feel obliged to defend the biblical accounts of creation. Many naturalists, on the other hand, are baffled when they observe the tenacity with which even modern Christians tend to cling to obsolete world views. Why not grasp the breathtaking insights of the sciences with both hands and praise God for them?

If we believe that God is a name for the transcendent Source and Destiny of the very reality we experience, science should be the best way of coming to know *how God's creative power actually operates*. In this section, I sketch a few scientific theories that seem to be particularly important for faith and theology.

#### 1. Big bang cosmology

Not so long ago, it was believed by notable scientists that the universe was static and had existed forever. This assumption seemed to render the gulf between faith and science unbridgeable.

Modern cosmology revealed that the universe indeed had a beginning and evolved in time. The way this might have happened is still controversial, but the

contours are fairly clear. Creation has had a beginning and has continued as an ongoing process ever since. Theology speaks of *creatio continua* in this regard.

According to the overwhelming consensus among contemporary scientists, it all began with the 'big bang'. Roughly 13.8 billion years ago, an infinite concentration of energy 'exploded', causing energy to 'fly in all directions'. Obviously, this is just a primitive way of imagining what happened. The actual process was much more complicated.

The ensuing expansion of energy was not uniform but scattered. Under the influence of 'force fields' (the electromagnetic force, the gravitational force, the strong and the weak nuclear force), irregularities appeared and triggered the emergence of structured energy conglomerations. The force of gravity led to the compaction of these energy concentrations into waves or particles.

Various kinds of particles combined and interacted to form ever greater and more complex forms. This happened in stages or 'levels of emergence', to which we will presently come. For now, we note that all material entities found in the universe today, whether subatomic particles, galaxies, or biological organisms, are the result of this process. When we think of reality as the 'creation of our God', we should realise that, as far as we know, this is how creation has happened and continues to happen!

## 2. Entropy—the supply of energy that 'works'

Cosmic evolution is not a story of unblemished glory. According to modern cosmology, the universe did not only have a beginning; it will also have an end. This is due to the 'law of entropy'.<sup>21</sup> Basically, this law says that whenever energy gets a chance to do so, it will move from compaction to dispersion, from order to disorder, from imbalance to balance, from potent energy to spent energy.

So contrary to what many believers assume, the process of creation did not ever lead to perfection and it never will. It began with a highly explosive situation 'far from equilibrium' and it will end in a totally eventless situation of 'total equilibrium'.

The entropic process is immensely destructive, because it takes everything apart that contains structured energy, yet it is essential for reality because the energy set free is needed for any new constructive process to take place.

In this process, energy is transformed from *potent* energy that 'can do work' to *spent* energy whose potential is exhausted. Entropy provides the fuel without which the cosmic process could not happen and nothing would exist. Think of the gasoline that turns into a useless gas while it releases the energy needed by a motor vehicle to move forward. Once the tank is empty, the car comes to a sudden halt.

Or to use a metaphor, dammed-up water can drive powerful turbines and cause devastating floods, but it is powerless when it reaches the tranquil lake below. Only a

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<sup>21</sup> The classical form of this theory is the so-called 'second law of thermodynamics'. However, the concept is now utilised by a great variety of academic disciplines. In my book *Prosperity, Poverty, and Pollution* (London: Zed Books, 1999), I have used it to explain aspects of economic processes, and in my book *Theology of the Biblical Witness* (London: LIT-Verlag, 2002), I have used it to explain aspects of the biblical tradition.

system that is ‘far from equilibrium’ has potent energy at its disposal. Once all power discrepancies have been levelled out, all processes come to an end.

Potent energy must come from somewhere. All energy in the universe came from the energy concentration (called ‘singularity’) that exploded with the big bang. More powerful processes tend to draw energy out of their respective environments into their vortex, causing the latter to deteriorate and disintegrate. Any construction implies deconstruction elsewhere in the system. Open systems can draw energy from adjacent systems and continue to function, but the latter lose out in the process.

In time, dominant concentrations of energy also become victims of the entropic process. Reality is subject to a universal rhythm of emergence, evolution, deterioration and decay. The relative speed with which particular entities form and disintegrate differs. A stone can take billions of years to disintegrate; a living cell can take a day or two. The pathways also vary immensely. But no phenomenon in the whole of reality is immune against the ‘gnawing teeth of time’.

Because evolutionary construction draws its energy from entropic deconstruction, the entropic tendency towards disorder is the precondition for order and novelty to emerge. The evolution of order and complexity does not run counter to the entropic process, therefore, but happens within its context.

Indeed, some philosophers of science believe that evolution may be the shortest available route to total dispersion.<sup>22</sup> Think of a river finding its way to the sea through rugged mountain ranges. This meandering route is guided by regularities that bring about the different phenomena we observe in the world today.

## The end of the world

While evolution implies an increase in order, organisation and speed, the entropic process leads to an increase in dispersion, disintegration and stagnation in the cosmos as a whole. Energy will disperse until all energy concentrations have dissipated. Scientists also discuss the alternative possibility that the force of gravity may eventually lead the cosmic process backward into a ‘big crunch’. But the outcome of either way will mark the end of the world as we know it.

That is the famous ‘freeze or fry’ scenario. Where there are no energy differentials, no processes can take place, nothing can happen, nothing distinguishable can exist. Long before the universe as a whole disintegrates, however, all life on earth will have vanished; the sun will have burnt out and turned into a ‘red giant’. The solar system will have disappeared in a giant fireball.

Ironically, science agrees with the biblical contention that our world has had beginning and will have an end. But science sees no prospect for a new and perfect reality (the ‘Kingdom of God’ or the eschatological ‘age to come’) to emerge from the ashes of the old. According to current scientific insight, neither ancient prophecy nor modern science fiction is likely to come to pass. In the last chapter, I will suggest

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<sup>22</sup> H. Sachsse, *Ökologische Philosophie: Natur—Technik—Gesellschaft*. Darmstadt: Wissenschaftliche Buchgesellschaft, 1984, pp. 6-8.

that Christian future expectations have a different meaning altogether. But we are not there yet.

The entropic tendency is only valid for a closed system, not for an open system. The reason is that an open system can import low entropy energy from its environment to replenish its resources. So it continues to function in spite of the abrasive entropic process. This is what all living organisms do when they ingest and digest all kinds of 'food' derived from other such organisms.

Similarly, the earth constantly imports huge amounts of energy from the sun which is processed by plants into low entropy energy stored in organic matter, otherwise life on earth would not be possible. However, taking a system together with its environment as a whole, there is always a preponderance of entropic dissolution over constructive compaction. The sun is slowly burning up and we benefit from this fact.

It is self-evident that the theory of entropy is of immense theological significance. The 'real God' is the Source of reality as a whole including its positive and negative aspects, that is, evolution and entropy. 'I am the Lord and none other; I form light and create darkness; I bring prosperity and create disaster; I the Lord, do all these things!' (Isa. 45:6-7).

The biblical tradition is remarkably realistic in its assessment of the chances of the world and everything in it to survive. Only the creative power of God can hold it together. Believers have always been confronted with the fact that suffering and death are part of the reality in which we are embedded. They have derived their reassurance from the suffering of Christ, their Lord, as a redemptive act of God.

They have been persuaded that the constraints of the world are not the constraints of God. We shall come back to that in the last chapter. At the same time, however, they have at least begun to understand that God must be involved in the inescapable suffering that characterises reality. The scientific theory of entropy has shed light on the question of why that should be the case in a world created by a powerful and loving God.

### **What does entropy mean for life?**

At the level of the individual organism, life's capacity to regenerate itself depends on the import of energy from other organisms. Yet eventually it also slowly succumbs to external or internal entropic forces. It can no longer import and process sufficient low entropy energy to maintain its functions. Cells have a limited lifetime and must be replaced at a certain rate. Bone cells last longer than the cells of mucous membranes, but they too do not last forever. Death is tantamount to the entropic dissolution of the living organism and each of its cells.

At the level of the biosphere as a whole, there is a constant throughput of energy that compensates for the loss of workable energy due to the entropic process. All life, except at the most primitive levels, depends on the death of other life. Humans must eat plants or animals to survive. Animals must eat plants or other animals to survive. This is how resources of low entropy energy are replenished within living organisms.

At the most primitive level of life, we find bacteria that can use chemical substances to secure the energy needed for their operation. But the vast majority of organisms living today depend on the transformation of sunlight into carbohydrates that store and release the required energy. This process, called 'photosynthesis', is extremely complex. It happens mainly in green leafy plants.

The biosphere of the earth as a whole is an open system that can import virtually infinite quantities of low entropy energy (potent energy) from the sun and radiate high entropy energy (spent energy) back into outer space. The sun is slowly burning up, but it will take an awfully long time to do so. By that time, we will all be gone; so this should not be our primary concern.

## The ecological fallout

More serious is the fact that humanity has begun to use up more low entropy energy trapped in organic and fossil matter than the system designed to replenish it can provide. If the process of depletion of biological resources outpaces the process of their replenishment—as it presently does—this has the same effect as total closure, except that it is drawn out over time.

If there can be no flourishing of life without the sacrifice of other life, our numerical proliferation and our surge towards ever higher living standards can only lead to the eradication of other life and, at least potentially, to the destruction of the earth's capacity to regenerate and maintain life as such. A complete eradication of all life through this particular process is certainly unlikely, but life in a future dispensation may not include humanity and the more important fellow creatures we live with now.

A huge proportion of the energy stored by plants in earlier times is today found in the form of fossil fuels—coal, oil and natural gas. Modern civilisation is exploiting this excess energy in factories, transportation, cooling, heating and lighting. Fossil fuels also provide the raw material for synthetic products that have come to dominate the global market, from packaging to crockery to medicines. It is hard to imagine how the vastly increased human population can survive and prosper without these limited resources.

Alarming, humanity is depleting these assets, built up by slow natural processes over millions of years, in a few short decades. Although new sources of fossil fuels have regularly been discovered in the past, lending deceptive credence to the argument that they are inexhaustible, we may be only a few more decades away from the depletion of the oil and gas resources that can be mined economically.

Over-exploitation releases carbon dioxide and other 'greenhouse' gases into the atmosphere at quantities that the ecosystem can no longer absorb. At the same time, we are destroying currently existing plant life that absorbs carbon dioxide and releases oxygen on an increasing and perturbing scale. Our processing procedures also inject toxic substances into the ecosystem that the latter may soon no longer be able to absorb.

There can be no reasonable doubt any more that humankind is moving into the future on a suicidal track. Profit-seeking and pleasure-hunting have led to a form of greed and short-sightedness that distorts our rationality, blunts our sensitivities, and will cost our progeny dearly. Our current consumption patterns jeopardise the chances of future generations and other life forms as well. As always, the first victims of any major economic calamity will be the masses of people at the lowest income levels. For a faith that claims to be a redemptive faith, as Christianity does, this must be a matter of the highest concern.

## Entropy in other dimensions of life

The interaction between evolution and entropy can also be shown to be operational at higher levels of reality, for instance, at the level of spiritual, social, economic and political processes.

At the spiritual level, dominant convictions, traditions and rituals crowd out alternative convictions, traditions and rituals. New scientific theories render older theories obsolete. A new fad sweeps away previous fashions and preoccupations. Once effectively challenged by modernity, African traditionalism will either succumb or stagnate in isolation.

At the social level, the prominence of patriarchy inevitably implies subservience of females and the younger generations. Women emancipation inevitably implies the collapse of male authority and dominance. When political power is concentrated in imperial centres, it obviously drains away the authority and autonomy of subjugated or subservient leaders and communities.

Cognisance of the law of entropy is particularly important for the assessment of economic reality and its ecological impact. By harnessing more energy to achieve greater economic performance, technology enhances the 'throughput' from resource base to waste, thus the transformation of low entropy (potent) energy into high entropy (spent) energy.<sup>23</sup>

Productive power is transferred from labour to capital. Human labour is increasingly replaced with mechanical processes based on fossil fuel. Redundant workers must be accommodated in non-productive pursuits such as administration, monetary institutions and services. Only when the economy grows more rapidly than this displacement of labour by technology, can some of them find productive employment.

It is said that the capitalist system must grow or collapse. Throughput must constantly accelerate to keep the system going. Consumers are enticed to replace what they possess with what they do not possess. A spirit of contentment and sufficiency is deliberately and successfully displaced by a spirit of discontent and greed. Easy credit creates the illusion of being surrounded by bargains that should not be missed. People buy things they do not need with money they do not have. Increasing levels of indebtedness render savings for family crises, diseases, unemployment or retirement unattainable. More and more underutilised assets, redundant gadgets and sheer waste are produced and discarded.

Due to differential rates of throughput, economic centres grow at the expense of economic peripheries or the natural environment. The first process leads to increasing discrepancies in productivity and life chances between social strata and economic regions, the second to the deterioration of the natural environment.

Insight into the entropic process is of critical importance for the Christian faith. It explains why every aspect of the creation of God is subject to emergence, evolution, deterioration and decay. Reality is so precious precisely because it is unique, vulnerable and finite.

If God is understood to be the ultimate Source and Destiny of reality as such, God sacrifices endlessly and abundantly through the suffering of God's creation for

<sup>23</sup> For details, see Klaus Nürnberger, *Prosperity, Poverty, and Pollution—Managing the Approaching Crisis*. Pietermaritzburg: Cluster Publications, 1999, chapters 3-5, 11-13.

a succession of creatures to get their chance. We are invited to participate in God's sacrifice so that new generations of humans and other creatures can live.

We should not take more from society and nature than we are entitled to. We also cannot expect a life that never reaches its limits. We cannot hope for an infinite continuation of the world we know.

## Entropy and aesthetics

The law of entropy also applies to the aesthetic dimension of life. Spending some time in an unspoilt part of South Africa, I jotted down the following remarks in my diary:

Yesterday, I saw this grandiose rocky landscape on the banks of the Orange River. It is magnificent, stirring, exhilarating. But it is based on erosion, thus destruction, rather than construction. That majestic scraggy old tree is so imposing precisely because it is dead. The wonderful explosion of shapes and colours of the flowers in Namaqualand in spring is based on the necessity to attract insects for pollination in a context of fierce competition.

This is how the Old Testament sees reality! In the Old Testament, the glory of God is not praised as an imaginary grandeur in an imaginary alternative space, but as nature in all its frightening power and ambiguity. The fact that humans can appreciate the beauty of what is destructive, threatening, gruesome, burning, or exploding is both awe-inspiring and humbling.

All this intense beauty cannot possibly be expressed in terms of a romantic ideal of perfection. The sciences demonstrate that the imagined heaven of perfection is an escapist dream. Evolution is only possible on the basis of entropy and gravity. A realistic aesthetic view of reality must observe and reflect the ambiguity of reality, otherwise it is self-delusion and fantasy.

### 3. Emergence—the staggered unfolding of reality

Emergence theory says that cosmic evolution proceeded in a number of steps, each characterised by a higher level of complexity.<sup>24</sup> When a number of components form a network of relationships, this network constitutes a 'whole' that is something more than, and something different from, the sum total of its components.

A higher level of complexity presupposes all the lower, less complex levels as its 'infrastructure', as it were, yet constitutes a new and different kind of reality with

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<sup>24</sup> Suggested reading: P. Clayton, *Mind and Emergence: From Quantum to Consciousness*. Oxford: Oxford University Press, [2004] 2006, pp. 38-62, Stuart Kauffman, *Reinventing the Sacred: A New View of Science, Reason, and Religion*. New York: Basic Books, 2008, pp. 1-87.

its own characteristics and regularities. Different levels of complexity then form a hierarchy of emergences.

Thus, atoms are composed of subatomic particles (protons, neutrons and electrons), yet their characteristics differ from those of these elementary particles. At the atomic level, hydrogen and oxygen can combine to form water, which is something completely different from its two gaseous components. Similarly, one can assemble all the elements that make up a human body—carbon, phosphorous, oxygen, nitrogen, and so on—and mix them together in the right quantities. But this 'soup' will never make up a human body. A living organism is an immensely complex and incredibly efficient network of relationships and interactions, rather than a number of entities thrown on a heap.

Scientists distinguish between weak emergence (based on nothing but higher levels of complexity without changing the laws of nature) and strong emergence (a situation where the higher level develops autocatalytical processes that can impact lower levels, thus cause 'downward causation'.) The distinction is not relevant for my argument.

Emergence is characterised by an increase of information, organisation, integration, interaction, flexibility, subtlety, volatility, vulnerability and transience. Just compare the simplicity and durability of a quartz crystal with the complexity and vulnerability of an earthworm!

Emergent evolution also implies that, as a process unfolds, there is progression in time, differentiation in space, and increasing variety. Levels of emergence are beautifully staggered according to levels of organisation. Here is a very crude overview of the hierarchy of emergences:

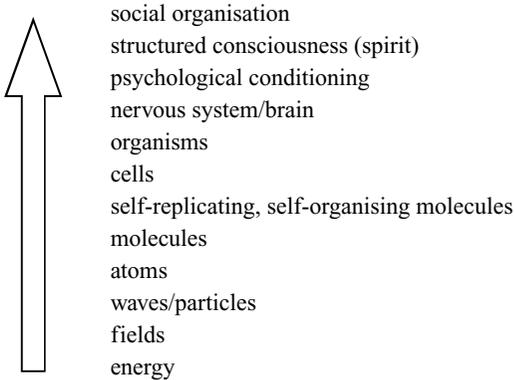
The most simple and fundamental constituent of reality appears to be energy. It is organised in fields. Energy concentrations (waves or particles) 'live' in these fields. The 'Higgs field' is believed to cover reality as a whole. It is impacted by force fields (electro-mechanism, the strong and the weak nuclear forces and gravitation) that determine the interaction between particles.

The gravitational attraction between energy concentrations leads to compaction. Because matter is compacted energy, mass and energy are equivalent. These subatomic particles, basic particles like protons, neutrons and electrons, are the most fundamental forms of matter. They combine to form atoms. Atoms combine to form molecules. Amino acids are sophisticated molecules that combine to form proteins. Proteins are the building blocks of cells, which are the building blocks of organs, which are the building blocks of organisms.

The biological organ of the brain constitutes the infrastructure for the mind; human minds are the building blocks of social structures and processes, which are again part of the ecological system as a whole.

We can see, therefore, that the theory of emergence encompasses the whole of immanent reality, from its most basic to the most highly developed levels. It covers virtually all fields represented at academic institutions.<sup>25</sup> Here is a simplified depiction of the hierarchy.

<sup>25</sup> Suggested reading: Nancy Murphy and George Francis Rayner Ellis, *On the Moral Nature of the Universe: Theology, Cosmology, and Ethics*. Minneapolis: Fortress Press, 1996, pp. 19-38.



The system of emergences as a whole is extremely complex. Lower levels of organisation are nested in higher levels. The energy trapped in matter, for instance, is unimaginably great. This energy can be released. As the use of nuclear energy demonstrates, tiny pieces of matter can release immense amounts of energy. A human body is estimated to harbour the energy equivalent of seven hydrogen bombs.

There are also multiple feedback loops between the levels. There is ‘upward causation’ from the most elementary to the most complex levels and ‘downward causation’ in the opposite direction. A lack of water in the body of a cat will cause the animal to die. That is bottom-up causation from the molecular level to the organic level. But when I chase a cat out of the kitchen, all the amino acids, atoms, particles and fields in her body have to move with her. That is top-down causation from the personal level down to the more elementary levels. Upward and downward causation run through the entire system in multiple feedback loops.

As can be expected, different levels of emergence are characterised by different kinds of regularity. Crudely speaking, the subatomic (quantum) level is characterised by probability, the physical level by causality, the chemical level by propensity, the biological level by teleology, the instinctual level by flexible responses to environmental challenges, the personal level by intentionality, and the social level by the power relations between collectives with different interests and intentionalities. Intentions are infinitely more variable than instincts. Instincts are again more variable than mechanical sequences.

## Life in an emergentist perspective

The earliest creation narrative in the Bible says that God breathed the breath of life into a lump of clay (Gen. 2:7). This is one of the instances where modern science can render the hazy intuitions of a bygone age more precise. The text maintains that a living being consists of the material from which living organisms are made and which is destined to decay plus something more elusive that makes these organisms tick—the ‘breath of life’.

Modern science tells us that the material of which an organism is composed is constituted by energy conglomerations organised in a staggered hierarchy of emergences from the subatomic to the biological level. What then is the scientific

equivalent of the 'divine breath of life'? Science shows us that the 'breath of life' consists of organisation and information systems of unfathomable complexity and vibrancy.

Trillions of complex systems function in perfect coordination. The 'ingenuity' that makes a living organism tick is mind-boggling. The fact that such an intricate system can display so much stability and versatility is nothing short of a miracle. It is often said by creationists that such an intricate and efficient system could never have emerged on its own. We could just as well say that no intelligence of the kind we know of could ever have been powerful enough to put such a system together.

When a key function is lost, say the provision of oxygen and glucose to the heart or the brain, it is all over and the organism disintegrates. Let me illustrate this with a recent experience. A much-loved Siamese cat, healthy and bouncy, suddenly dies in front of our eyes for no apparent reason. My hands carefully move through the body to find any injury or spasm, but to no avail. The skin is as soft as silk, all muscles are totally relaxed and the eyes seem to look at me in their sparkling blue.

Everything that made up this organism seems to be as present and intact as a minute before. But life has gone. It seems as if all systems that pass information through the body have been switched to zero. Immediately the order of the body's chemistry begins to disintegrate. The immune system is no longer operational. Decay ensues at that very moment. In terms of Genesis 2, God has withdrawn the gift of life from the lump of clay.

Seen in cosmic contexts, life is the highest material manifestation of the evolutionary mechanisms that cause constructs to emerge. Yet it is feeding on the entropic process. Life is close to the peak of a much larger, much more comprehensive hierarchy of emergences whose most basic building blocks are composed of energy, fields, waves and quanta, but which is built up on this foundation in a great number of levels of complexity culminating in human consciousness.

As mentioned above, higher levels of complexity render reality ever more volatile, flexible and fleeting. Rocks may remain stable for billions of years; some trees may survive for centuries; the human body may reach the age of eighty or ninety years. By comparison, the incessant flows of content within human consciousness have a short life span, which means that they are changed or replaced by others in fairly rapid succession.

## The personal level in an emergentist perspective

Human intentionality and agency are embedded in, and constrained by, the whole range of regularities obtaining throughout the system. From where I am, I can walk in all horizontal directions, but I cannot go vertically up to the sun or down to the centre of the earth. Physical forces prevent me from doing so. I can also not survive without food, water, or sleep. I cannot single-handedly prevent a violent revolution from breaking out.<sup>26</sup>

<sup>26</sup> Suggested reading: Ph. Hefner, *The Human Factor: Evolution, Culture, and Religion*. Minneapolis: Fortress Press, 1993, pp. 55-75.

Conversely, human intentionality and agency can indeed impact all lower and higher levels. I can take a gun and destroy the living organism of an animal or a human being. I can also try to instigate a strike or act as a mediator in a social conflict. And just imagine the kind of impact triggered by the detonation of a nuclear weapon—reaching downward to the brute force of energy entrapped in matter and upward to the social level and the entire ecosystem!

So intentionality and agency are not powerless, but they are indeed subject to constraints. They can only become operational to the extent that the different sources of power that determine a particular process are balanced out sufficiently for an additional source of power (the power of my own effort) to change the direction of the process. Where the powers stacked against my effort surpass my own power, I can try to garner additional power. While I cannot go through a wall, I can organise a bulldozer and use it to push through the wall. But even that power is constrained.

Processes can follow exponential, rather than linear trajectories. This is why tiny changes in the direction of a process can make huge differences in the long run. Chaos theory speaks of ‘sensitivity to initial conditions’. Say a raindrop falls vertically towards a sharp ridge in the Andes Mountains. The slightest breeze can let it fall towards the east and end up in the Atlantic Ocean or west and end up in the Pacific. This is called the ‘butterfly effect’: theoretically the flip of the wings of a butterfly in Australia can lead to a tornado in the United States.

The supra-personal (social) level of emergence again follows its own regularities. Here a process depends, for instance, on the kind of collective interests and intentions that forms a critical mass within a society, the social and natural environment in which it is embedded, the hierarchy according to which a society is structured, and the power and determination elites and collectives can muster to give direction to social processes. Social structures and processes are again embedded in the overarching dynamics of the earth’s ecosystem.

There are a few other theories, notably the theories developed by brain science and chaos theory, which are important for the personal dimension of life. We shall come to them in the next chapter on the human being. For now, it is sufficient to say that the theory of emergence is capable of answering age-old theological questions about the relation between nature and humanity, matter and spirit, body and soul.

As we shall see, it can help faith and theology to solve even the most intractable problem the biblical faith had to contend with at all times, namely how so much waywardness, meaninglessness, suffering and destruction can possibly be caused or tolerated by an all-powerful and loving God. In theology, this problem is called theodicy, the justification of God. We shall certainly come back to that.

#### **4. Darwinian evolution in various dimensions of life**

The Darwinian theory of evolution says that mutations of genes can lead to organisms that are better adapted to certain environments than others, thus out-competing the latter in such environments. This process has been dubbed the ‘survival of the fittest’. It is important to note, however, that fitness is always fitness

to survive and flourish in certain environmental niches—camels in deserts, bears in the Arctic.

Darwinian evolution has been the target of particularly vehement attacks of believers committed to the assumption that the Bible is identical with the eternal Word of God and cannot be faulted in any way. In chapter 5, we have shown that this assumption is untenable both in experiential and theological terms.

Of course, all scientific theories are provisional and subject to review and the theory of evolution is no exception. Darwinian evolution has already undergone substantial revisions and refinements, particularly through the development of genetics. But the critique of a scientific theory is the task of science, not theology. If a better theory surfaces, theology will again attribute the underlying process to God.

There is no justification for the opinion that the theory of evolution contradicts our faith in the creation of the world by God, whether 'in the beginning', or as a continuous process. If God is perceived to be competing with inner-worldly factors, God is no longer taken to be the transcendent Source and Destiny of reality as a whole, but a 'supernatural' part of immanent reality. In biblical terms, a part of reality taken to be divine is an idol.

The biblical accounts of creation are not meant to be scientific records of what happened 'in the beginning'. They use anthropomorphic metaphors to proclaim God as the Creator of our world. If God could create with his hands, or a decree, or a violent conflict, or his wisdom or the divine *logos*, as the biblical creation narratives suggest, God can also create through the evolutionary process.

A conservative backlash against science, based on an inappropriate understanding of the character of the biblical witness, undermines our task to undergird and lead scientific and technological advances in terms of their divine purpose and meaning.

Evolutionary theory is not restricted to the biological sphere but applies to a wide range of phenomena at higher levels of emergence, such as instincts, subconscious conditioning, structures of consciousness, cultural formations, as well as social, economic and political organisations.

Certain civilisations have produced achievements that others have not. Modernity has rendered traditionalism uncompetitive in the economic spheres of life. Differences in the kind of intelligence people have inherited or developed lead to their greater competence in certain fields—computer science, language, social organisation, artistic performance, or sport. All this is quite self-evident.

'Social Darwinism' has been severely criticised because it has led to cultural arrogance, the legitimisation of various kinds of imperialism, the discrimination against women, and monstrous atrocities such as the extermination of people with handicaps, certain race groups deemed unwanted, inferior or evil, etc.

However, its abuse has not rendered the theory invalid. Instead of discriminating against people who are less adapted to current social and economic necessities, we need to open up social spaces in which they can excel and help them to develop their gifts to the fullest.

This is an example of how science can help faith to understand reality better, while faith can help science to become more responsible in terms of a wholesome system of meaning. The divine vision of comprehensive optimal well-being, as promulgated by the Christian faith, can lead our motivation in more beneficial directions.

## 5. Relativity theory and quantum physics

There are scientific theories that have caught a lot of attention in the science-religion debate recently but that, in my view, do not necessitate *theological* re-conceptualisations. The reason is that they have no pre-scientific counterparts in the world-views we find in the biblical and theological traditions. So no conflicts have arisen in these cases.

For instance, nobody in the science-religion debate is concerned about chemical reactions, say between hydrochloric acid and limestone, simply because the biblical and theological traditions have never dealt with such issues and believers and scientists have no reason to question them on any but purely scientific grounds.

This is also true for the theories produced by ‘the new physics’ during the twentieth century. These theories operate at levels of emergence to which the pre-scientific tools of observation and explanation of our spiritual ancestors provided no access. Even today most believers have no inkling of what happens there.

Subatomic physics has become the darling of theological apologetics in recent times. The reason is that these theories seemed to loosen up the strict determinism prevalent in the mechanical physics up to the nineteenth century and developed mainly by Newton and Maxwell.

The twin theories of relativity, the theory of indeterminacy in quantum mechanics, chaos theory and complexity theory seemed to open up the cosmic system to contingency and chance, as opposed to strict determinism. This apparent relativisation of causality seemed to render the idea of the presence, intentionality and agency of God more plausible.

This conclusion does not follow. Chance occurrences are by no means more indicative of God’s intentionality and agency than occurrences that follow regularities. According to the biblical tradition, it is precisely the regularities experienced in reality—the movement of the heavenly bodies, the seasons, the synergies between living organisms—that point towards the wisdom of the Creator.

Ancient Near Eastern creation narratives, including Genesis chapter 1, emphasise that it is the Creator who overpowers chaos by means of solid structures. If God is the transcendent Source and Destiny of reality as a whole, rather than one of the factors operating within this reality, God does not need contingency or chance to act. God can act through regularity as much as through probability, contingency and chance!

I do not deny that these theories are absolutely fascinating in scientific terms.<sup>27</sup> Assuming that they are dealing with the way the creative power of God is at work, they should be just as fascinating for ordinary believers and professional theologians. They present us with possibilities that are counter-intuitive and counter-factual in terms of our everyday experience of reality. They have led to mind-boggling technological innovations that have changed our way of life and our prospects of survival. So they are anything but immaterial for the Christian faith.

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<sup>27</sup> Suggested reading on ‘the new physics’: B. Greene, *The Fabric of the Cosmos: Space, Time, and the Texture of Reality*. New York: Random House (Vintage edition), 2005. S. Hawking and Mlodinow Leonard, *The Grand Design: New Answers to the Ultimate Questions of Life*. London: Bantam Press, 2010.

However, they reveal the creative power of God, just as the pre-scientific worldviews of old and Newtonian physics had done before. They say nothing about the intentionality of God and the meaning of the universe, which is the proper topic of theology. Theology can take these theories on board as they evolve without changing its conceptual apparatus.

The hope that subatomic physics would bring us closer to a reliable determination of the transcendent is as spurious as the pre-modern 'proofs' for the existence of God. Such insights only tell us that the creation of God is more complex, unpredictable and awesome than we always thought it was. That is certainly a reason for marvel, praise, humility and gratitude.

They also lend substance to our responsibility before God. They refine our apperception of the consequences of our current institutions, procedures, attitudes and actions, thus enhance our sensitivity to what is redemptive rather than oppressive, creative rather than destructive. But they do not, on their own, provide meaning, criteria of acceptability, or visions of what ought to be. They do not make humankind more responsible. They are only capable of updating the pre-scientific world view that Christians inherited from a pre-scientific past.

If God is the transcendent Source of precisely the reality that the sciences explore, is the 'hypothesis' that there is such a God not superfluous?

## Section II

### God's benevolent intentionality proclaimed by faith

This then is what science can tell us about the reality in which we are embedded and of which we form a part. If science is able show us how the world emerged and evolved in time, then this is the way our God created the world—no other! Science reveals the creative activity of the *real* Creator in his creative work, superseding the guess work of former ages, however respectable and dignified its long history may have been.

As all serious scientists will concede, the insights of modern science remain partial, provisional and perspectival. But science presents us with the best information on reality we have at present. So, as far as we know, and as far as humans have the capacity to know, the way science describes the cosmic process is the way God is busy creating the universe from one moment to the other, reaching back to its first beginning and forward to its ultimate end.

Has science then rendered faith obsolete? Has it replaced faith? No ways! At its core, faith was never meant to fulfil the functions of science, so it cannot be threatened by the advances of scientific insights. Faith was always concerned primarily about the relationship between humans and God.

## 1. Ambiguity, dualism and benevolence

What then is our message? Faith recognises God's creative power in experienced reality and proclaims God's benevolent intentionality for this reality. Faith is trust in God's loving concern in the face of all experiences to the contrary.

How can faith live with such a contradiction? Are we not forced to postulate an evil principle that contradicts the good principle we seek to attain? Again and again, this kind of dualism has emerged among the faithful. We shall come back to that in the next section.

However, the main stream of the Israelite-Jewish faith resisted such a distinction, claiming that God was the transcendent Source of reality as a whole, and that nothing could exist or happen without God's power and God's will (Job 2:10; 9:12; Ps. 104:29; Lam. 3:37-38).

Alternatively, must we not find some metaphysical resolution of the contradiction? An experiential realist approach will be wary of doing so. In the first place, no such attempts have yielded satisfactory results in the past.

In the second place, careful scientific analyses can explain the existence and operation of at least some of these ambiguities, for instance, the contradictory forces of gravity and entropy, the importance of death for life, or the simultaneous existence of ruthless selfishness and loving concern in our brains.

This kind of ambiguity is built into the fabric of the reality we experience. Using mathematics rather than metaphysics, subatomic physics is confronted with a similar problem: It cannot find a mathematical resolution of the contradiction between relativity theory and quantum mechanics, and yet neither the one nor the other insight can simply be dropped.

So instead of asking how faith can live with such a contradiction, we must ask how faith could possibly escape this contradiction! If there is no way we can get rid of ambiguity in principle, once and for all and in all aspects of life, we have to live with it.

And yet we must opt for the beneficial against the detrimental, for life against death, for good against evil (2 Chr. 25:8). The existence of ambiguity in reality is no excuse for being ambiguous in our commitment. On the contrary, it calls for determined motivation and action to overcome evil as far as that is possible under any set of circumstances.

The ambiguity of reality is not even sufficient reason for assuming that God's own intentionality is ambiguous. The New Testament is quite adamant that God's intentionality is benevolent. This insistence grows stronger rather than weaker where reality seems to suggest otherwise. The deeper the darkness, the greater the need for light! God is light (love) and there is no darkness (evil) in him (1 John 1:5-7).

Faith in the benevolent intentionality of God is in line with the obstinate and courageous struggle of all living creatures against the inevitability of suffering and death in the world.<sup>28</sup> They are programmed to do so. Martin Luther found a telling

<sup>28</sup> 'Like virtually all living things, (lichens) will suffer any hardship, endure any insult, for a moment's additional existence.' B. Bryson, *A Short History of Nearly Everything*. New York: Broadway Books, 2003, p. 336.

formulation for this dialectic: faith stubbornly upholds 'God against God'—the God of redeeming grace against the God of merciless condemnation; the God of burning compassion against the God of an ambiguous, even catastrophic reality. The appeal of a child to the love of its parents can overcome their anger or indifference.

## 2. What does 'in the beginning' mean?

The fact that the creation narratives found in religious texts do not match the picture gained by the natural sciences forces us to look at the character of these stories. They constitute what sociologists call 'symbolic universes', rather than scientific records. They provide humans with a framework within which they are able to discern meaning, acceptability and authority based on the benevolence of God.

The most ancient of them are myths. Myths love to personalise plants and animals. They also depict the transcendent as if it were part of immanent reality. Myths are not the same as fairy tales. They are narratives that use symbols and metaphors to express the meaning that people have picked up in pre-scientific times on their way through life for many generations.

There is a whole series of such expressions of faith in the Creator found in the Old Testament—in the Psalms, the Book of Job, Deutero-Isaiah, Wisdom of Solomon, Sirach and many others. In biblical times, these narratives changed dramatically as current world views changed.

The two creation narratives found in Genesis chapters 1 and 2 present us with vivid examples. They belong to two different cultural contexts and two different phases of ancient Israelite history. The creation narrative found in Genesis chapter 2 is much older and more primeval than that found in Genesis chapter 1.

This narrative obviously emerged in a rural and patriarchal setting. There is no sea. Sun, moon and stars play no role in the drama. The stage is that of a fertile garden full of delicious fruits; animals are close companions of humans. The male is taken to be the essential human being.

The drastic difference between the lush fertility of Mesopotamia and the harsh life on the Palestinian highlands seems to provide the background for the tragic fall of humanity into sin and suffering. The narrative is placed at the beginning of a series of sinful occurrences that finally led God to initiate a new beginning with the calling of Abraham in Genesis 12.

Genesis chapter 1 presents us with an entirely different story. The scene is cosmic rather than local. The human being is created last, rather than first. Male and female are created together and at the same level of dignity. There are astounding cosmic developments involving the sea, the sky and celestial bodies, but there is no fall into sin.

According to biblical research, the narrative is linked to the re-establishment of the cult in Jerusalem after the Babylonian exile. When compared with the older story found in Genesis chapter 2, it appears to be a carefully designed theological construct rather than a grown myth.

There are some indications that it responded critically to the *Enuma elish*, the Babylonian myth of creation. Its powerful insistence that every human being—male and female—is created in the 'image of God', thus as a 'royal' representative of God, seems to counteract the transparent ideological proposition that humans were created to act as slaves of selfish gods (and their aristocratic beneficiaries on earth). Sun and moon—deemed to be divinities in the Ancient Near East—are demoted by stating that they were created only after the plants and confining their functions to the separation of day and night.

More prominent is another motif, namely the conquest of chaos through the creation of structures that make the unfolding of life possible. God dispels darkness by creating light. God builds a 'canopy' to separate the waters above and below, and separates the sea from the land, thus making space for life to develop and keeping the primeval ocean (a symbol for destructive chaos) at bay.

Such a message of stability and reliability was desperately needed to motivate the Jews to rebuild their lives after the devastations caused by the Babylonian conquest of Canaan and the exile. The message that the catastrophe had been caused by apostasy and disobedience had been hammered into a despondent people for a very long time. Now a positive message was called for: we can begin afresh. Yahweh is a God who turned darkness and chaos into light, stability and teeming life.

Its most prominent concern is, however, to embed the Sabbath in the foundations of cosmic reality, thus in God's original and ultimate plan. It reinforces the seriousness of the Sabbath as one of the pillars of Jewish identity after the dispersion of the tribes of Israel over the entire near East. Judaism needed such institutions to survive as a distinct entity.

Faith has always assumed that the world had a beginning, but for a different reason than that promulgated by modern science. Its concept of 'creation in the beginning' was meant to proclaim the power of a benevolent Creator over the power of chaos, death and destruction.

The concept of 'continuous creation' was meant to reassure afflicted believers that it is a benevolent Creator, rather than the forces of evil, who was in charge of their unfolding lives and the operation of their life worlds. With such a God in control, there was no reason to fear.

Faith has also always assumed that the world we know will come to an end. But again, the basis of that assumption was different from that of modern science. It wanted to say that the world is not divine. It does not represent ultimate reality. It is not eternal and limitless. It depends on a higher power. It cannot impose its rules forever. It does not have the last word.

God has the last word. And this God, the ultimate Source and Destiny of reality, is a God of benevolent intentions. The difference between pastoral reassurance and scientific prediction is of critical importance for the relationship between science and faith.

### 3. The message of what ought to be

There is no scientific evidence for these contentions of faith and there cannot be. They do not *analyse* what actually happens or is bound to happen in reality, but *proclaim* God's creative and redemptive concern for God's imperfect and vulnerable creatures. They are not descriptive, but *performative* statements, that is, they create faith in what they proclaim.

The 'Word of God' always stands for what *ought* to be, rather than what *happens* to be. At the background, there is always God's vision of comprehensive optimal well-being. It always represents God's creative and redemptive response to human predicaments and depravations. The 'true' God, as Christians perceive the ultimate Source and Destiny of reality, is a God who is *for* us and *with* us and not against us.

The 'Word of God' warns and reassures its hearers wherever it hits home in actual human lives. On the one hand, this is a God who spells out the preconditions for wholesome human existence in no uncertain terms. Following Paul, theology calls this divine demand and warning the 'law of God'.

On the other hand, the 'Word of God' proclaims God's suffering and transforming acceptance of the unacceptable into God's fellowship. It does not condone their unacceptable disposition and behaviour, but transforms them from within God's fellowship. That is the core of the 'good news'—the message of the ministry, death and elevation of Christ to ultimate authority for our sakes.

#### 4. The benevolence of the creator God

Once touched by this message, believers will discern God's benevolent intentionality in the world process as experienced by us and as revealed by science. This has always been the case. But science gives us more confidence for doing so. Yes, there is ambiguity, catastrophe, suffering and death! But believers will be struck with awe when they realise,

- that the world process was triggered by an amazing, singular event, that it has its time and that it will not always exist;
- that it follows the laws of nature and moves forward towards the realisation of potentials;
- that the interplay between entropy and gravity leads to increasing complexity;
- that the world was 'fine tuned' to such an extent that the emergence of different levels of reality became possible;
- that life emerged at one of these levels, evolved and differentiated into billions of species, and
- that the evolution of life led to a creature with the capacity to observe, explain and predict the course of events, but also to reflect upon its role in the world, to evaluate alternatives, take decisions, act upon them, and account for its decisions and actions.

All this is mind-boggling. It shows how scientific insight can enrich the Christian faith. There is a thrust in reality at all its levels towards the realisation of potential. Whether subatomic probability, Newtonian causality, biological teleology, or personal intentionality—they all lie on the same trajectory.

At the personal level, this thrust moves from mere survival to social justice, and on to caring concern. It is faith that discovers this benevolent divine thrust, that is, the meaningfulness of reality in spite of its apparent meaninglessness. But it is science that spells out the detail of its manifestations, the mechanics, as it were.

To use a metaphor, a racing car is designed by engineers according to mechanical requirements, and these impose constraints on its functioning, yet it has a purpose and an intrinsic rationale. It has been constructed with a powerful set of potentials that can only be

realised by a strong resolve. In the same way, modern science has opened our eyes to the complexity, profundity and immensity of God's creation, but faith intuitively discerns God's intentionality behind God's creation and allows itself to become involved in it.

Science has also opened our eyes to the fact that its coming into existence and its subsequent evolution was highly improbable. The world, and everything in it, need not have existed at all. Faith will discern in this fact that reality, including our lives, is based on God's benevolence. Realising this, believers will be overcome with profound admiration, gratitude and humility.

Cosmologists concede that there could have been a totally different world, if the initial conditions and the values of the four primordial physical forces had been different, and that by ridiculously narrow margins! But then our earth would probably not have come into existence. Nor would life. Nor would anyone of us. And that would have been a pity, to say the least. Expressed in theological terms, we owe the very existence of the universe including ourselves to the grace of God.

Why don't we simply say that, by and large, the cosmic process goes in a positive direction, without assuming the 'benevolence' of a personal God?

## Section III

### In which sense must God be considered a person?

#### 1. For persons, God is a person

Scientists are used to applying the criteria of empirical evidence, mathematical stringency, or at the very least, plausible conjecture to reality. For them, the assumption that the transcendent Source and Destiny of reality, whatever that might be, is a person may seem counter-intuitive, if not counter-factual.

The world process is obviously not based on a continuous and all-encompassing series of personal decisions and actions, as faith in a personal God seems to suggest, but on the operation of impersonal mechanisms following the laws of nature.

We came across some of the reasons why God has to be a person *for us human beings* when we discussed the grounding of faith in our foetal and infant experiences of Mother, Father and elder Sibling. But the intuition of God as a person is also grounded in our experience as adults. Being persons, humans need a personal Other to relate to the wonders of creation in a personal way.

Can you be grateful to the regularities that lead the behaviour of energy conglomerations in certain directions? Can you praise the chance events that made your very existence a reality? Can you 'worship' the splendour of a waterfall or the rising sun? Pre-scientific religions did, but then they personified the phenomena of nature.

Perceptive and sensitive naturalists may experience the same kind of wonderment, but they have no personal Other to whom they could direct their marvel, their gratitude and their praise. They also have no personal Other whom they could bring their fears, failures, agonies and frustrations. They do not feel accountable to a transcendent personal authority when dealing with the natural world.

At the lower levels of emergence, nature is not personal. It does not hear and it does not speak. It has no benevolent intentions and it takes no conscious actions. Awareness of this fact seems to be critically important for an ecological responsibility to develop.

Naturalism stands in stark contrast to the primal view, found in traditionalist cultures, where reality as a whole is permeated with personal beings, whether in the form of spirits (as in animism), or human manipulators of impersonal forces (as in dynamism).<sup>29</sup> Some psychologists believe that animism is the basis of the development of a personal concept of God, in as much as reality is attributed to personal intentionality and agency of some kind or other. As we have seen in chapter 6, they also believe that the origin of this personification of reality is the experience of a personal Mother in early infancy.

For completely different reasons, some naturalists show themselves accommodating. Modernity has lost its awareness of the 'sacred' and the consequences are quite devastating. Stuart Kauffman argues that we need to 'reinvent the sacred' and do it in a way that all humans can agree. To achieve that, we must harness the concept of 'God', Kauffman argues, because this is 'our most potent symbol'.<sup>30</sup> In naturalist terms, God can then be defined as the 'creativity' that manifests itself in the evolutionary process. To reflect the unpredictability of this creativity, the theologian Gordon Kaufman calls God 'serendipitous creativity'.<sup>31</sup>

However, 'creativity' is an abstract noun derived from the verb 'to create', which demands a personal subject. The process of evolution does not create; it just happens. Creativity is an anthropomorphic metaphor that works for faith in a personal God, but not for naturalism. Moreover, 'creativity'—whether in terms of naturalism or faith—is also an inadequate metaphor, because it covers only the constructive, evolutionary dimensions of experienced reality, leaving the destructive, entropic aspects aside. That is why I use the traditional concept of 'the Creator' rather sparingly.

For believers, God is the transcendent Source and Destiny of reality. In terms of emergence theory, this reality includes the level of personhood. If there were no personal Other, they could not relate to impersonal levels of emergence in personal terms. They could also not transcend *themselves* as persons towards a transcendent Source and Destiny of reality as a whole.

I argued in chapter 4 that, if humans do not intuit such a personal Other, they experience themselves as the only persons around. There is no higher authority. As the peak of the pyramid of emergences, they feel entitled to the status of masters, owners and beneficiaries of reality as a whole. They absolutise themselves.

<sup>29</sup> In dynamism, the Supreme Being as such is not necessarily experienced as a person. Though personified in mythological terms, it represents the sum total of dynamistic forces in the universe. For details, see Klaus Nürnberger, *The Living Dead and the Living God: Christ and the Ancestors in a Changing Africa*. Pietermaritzburg: Cluster Publications, 2007, pp. 20-39.

<sup>30</sup> Stuart Kauffman, *Reinventing the Sacred: A New View of Science, Reason, and Religion*. New York: Basic Books, 2008.

<sup>31</sup> G. D. Kaufman, *In the Beginning . . . Creativity*. Minneapolis: Fortress Press, 2004.

Given the egotistic nature of the human being, it is a small step from the assumption of human ownership of reality to the practice of degrading reality as nothing but a quarry to be mined for personal gratification and aggrandisement. It is this kind of self-estimation that has led modern humanity in the direction of an economic-ecological catastrophe.

## 2. God must be much more than a person

As discussed in chapter 6, developmental psychology believes that we tend to absolutise the personal dimension of reality because the first decisive impression of the outside world in early infancy was the face of ‘Mother’. That she also has breasts to feed and hands to change nappies does not seem to occur to the infant (or the researcher). Mother’s face is the overwhelmingly significant experience.

In one experiment, 90 per cent of children asked to make a drawing of God drew nothing but a face.<sup>32</sup> Perhaps this is the primal reason for us to spiritualise God. Then God is not just a person, God is *the* person, and *nothing else* but this person. This infantile assumption may be an important stumbling block on our way to a mature faith. It should be relocated where it belongs, namely in infancy, and left there. Mother, in fact, has breasts and arms; she consists of particles, atoms, molecules and cells; her mind is based on neurological processes.

That is the mature view of the matter and it should inform the way we think about God. God-consciousness has always expressed itself in anthropomorphic metaphors. That cannot be otherwise, because we need to relate to God in personal terms and have no other language to express it. But then we have to apply the anthropomorphic metaphor in more comprehensive and realistic terms. To leave the infantile notion of a pure spirit, pure intentionality, pure agency (*actus purus*) behind can only enhance the reality component of our intuitive perception of God.

Emergence theory suggests that God, the transcendent Source and Destiny of reality as a whole, is of necessity *much more* than a person, just as humans are much more than persons. While personhood may indeed be situated at its developmental peak, it is only a tiny aspect of human reality. Humans are also organisms, amino acids, atoms and subatomic particles. Personhood presupposes the entire infra-personal hierarchy of emergences and it is again embedded in the supra-personal sphere of social structures and processes.

As the transcendent Source and Destiny of reality as a whole, God is certainly totally other than a human being. This does not imply, however, that God cannot manifest God’s intentionality in the intentionality, motivation and agency of human persons—a prophet, a king, a priest, a law giver, Jesus of Nazareth, a believer—as the biblical Scriptures assume.

At the personal level of emergence, God indeed manifests God’s intentionality and agency in personal terms. It would remain incomprehensible if that were not the

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<sup>32</sup> M. D. Faber, *The Psychological Roots of Religious Beliefs: Searching for Angels and the Parent-God*. Amherst, NY: Prometheus Books, 2004, p. 215 (quoting Robert Coles).

case. 'Everything we experience is mediated by the brain.'<sup>33</sup> And the human brain is the precondition of the personal dimension of reality.

That God is manifestly more than a person is beguilingly self-evident, even in biblical terms. Ancient believers were not foolish. They observed regularities, for instance, in the movement of the stars, the rhythm of the seasons and the cycle of life from conception to death.

They attributed these regularities to the wisdom of the Creator. There is nothing to prevent us from doing the same in terms of current scientific insight. On the contrary, our concept of God can only gain in appropriateness and profundity by doing so.

### 3. The existence of evil

These observations can help us resolve what may have been the greatest obstacle to a vivid faith in God throughout its long history, the existence of evil. If God is a person, God is characterised by intentionality and agency. But reality is highly ambiguous. There is evolutionary construction, but also entropic destruction. There is the glory of healthy life, but also the misery of disease and death. There is human wisdom and human folly. There is immense goodness and monstrous depravity.

How does all this match with a personal and benevolent intentionality? The question is rather simple: How can a powerful and loving God cause, or allow, so much evil to exist and happen in a world under 'his' control? It just does not make sense. In theology we call this problem '*theodicy*'—the justification of God.

The problem already emerged in biblical times. It led to all kinds of theories to which we shall come below. For now, it suffices to say that it is science that can help us to reconceptualise inappropriate faith assumptions about God that have led to the impasse in the first place.

Again it is the scientific theory of emergence that provides us with the necessary clues. Intentionality and agency belong to the *personal* level of emergence. They do not appear at the lower impersonal levels of emergence—the quantum level, the physical level and the biological level, or at higher impersonal levels of emergence—the structures and processes of society.

The personal level of emergence is just as real as all the impersonal levels—something that a reductionist science tended to overlook. There is downward causation from the personal level through the entire impersonal hierarchy towards the quantum level and upward causation from the personal level to the social levels, which are also impersonal.<sup>34</sup>

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<sup>33</sup> M. D. Faber, *The Psychological Roots of Religious Beliefs: Searching for Angels and the Parent-God*. Amherst, NY: Prometheus Books, 2004, p. 218.

<sup>34</sup> Given a reasonably coherent collective 'spirit' and a determined leadership, upward causation can make it appear as if a group, a class, or a nation possesses intentionality and agency. But as such, these higher levels are impersonal.

And the personal level is of pivotal importance for the very essence of the human being as a species and its relation to the rest of reality. Humans are more than boulders, succulents, reptiles, or ant heaps precisely because they are persons.

The biblical Scriptures explicitly testify to the fact that God became a person for *humans* because humans are persons. The kings, lawgivers, prophets, priests and authors of the biblical Scriptures were all humans and, as such, personal mediators of the notion of a personal God.

For Christians, it was, above all, Jesus of Nazareth, discerned and believed to be the messianic representative of God, who gave ‘the Word of God’ a human face (John 1:1-14). And into this ‘image of God’ in Christ, believers are meant to be transformed (2 Cor. 3:18).

### **So what about a tsunami?**

The theological consequences of this insight are considerable. A tsunami, for instance, is not caused by a personal decision of an irate deity, but by tectonic shifts in the earth’s crust that follow natural laws—and natural laws are the laws of God!

Cancer is not inflicted on human beings as a divine act to humiliate or chastise transgressors; it is caused by a failure of their immune systems to eradicate rogue cell mutations. Such occurrences do not belong to the level of personal decision-making, but to the level of biological processes, which are also of God.

The tendency of believers to see a divine purpose, decision and action behind every event, whether in cosmic history or in personal life, betrays an over-personalisation of the cosmic process. Not even in our human lives are all events caused by our personal decisions and initiatives. There are automatic neurological reactions, routines, habits, social conventions, biological processes, auto-catalytical mechanisms, causal sequences, chemical reactions and subatomic dynamics that make our lives tick.

Once again, this over-personalisation of God may be due, as developmental psychology maintains, to the experience of Mother as nothing but a person in early infancy. But then believers should leave it where it belongs. A mature faith should not perceive God in terms of pure intentionality, pure agency, pure spirit presiding over a world without regularities and constraints. After all, we know that there are such regularities and constraints in the world of which we are a part and we believe that they are due to God’s creative activity.

However, once geared to a personal God, faith may recognise that seemingly autonomous processes, and the regularities and contingencies that govern them, also reflect the benevolence of God! Without entropy, there would be no energy; without causality, there would be no physical process; without death, there would be no life; without brain functions, there would be no consciousness; without our decision-making capacity, there would be no freedom; without social structures and processes, there would be no context for a functioning personhood.

The negative aspects of experienced reality are in fact indispensable for the positive aspects to exist and happen. If God, the transcendent Source and Destiny of

reality, is deemed a person, there is no reason for us *not* to ascribe these seemingly impersonal regularities to God's benevolent intentionality.

It would seem that such an assumption is in line with the constructive thrust and restorative power found in empirical reality, even where destruction and depletion are the inevitable corollaries of these processes. This is simply how our world is put together and our puzzlement and exasperation are not likely to change it.

#### 4. Faith as a 'struggle with God against God'

In the Christian faith, there is an ironic twist to the Platonic idea of perfection. Christians serve a Lord who set out to establish the Kingdom of God, arguably the most perfect situation thinkable, but ended on the cross. This Lord represents a God who intends to create a wonderful world, but whose creation is subject to the entropic process.

In both cases, the biblical faith reflects the ambiguity of the reality we experience. To engage in fantasies and dreams about an ideal world does not alter the facts. Everything emerges, evolves, deteriorates and decays. And at the end, nothing will be left. However, this brutal fact does not render faith in the benevolent intentionality of God superfluous, but *calls* for it.

The 'human condition' does not lead to fatalism and despondency among believers, but challenges, motivates and energises them. Meaninglessness calls for meaning; depravity calls for righteousness; powerlessness calls for empowerment; vulnerability calls for protection; mortality calls for determination to survive; deprivation calls for a space to flourish.

The benevolent intentionality of God moves *against* the obstructive and destructive regularities of God's world, pushing it in the direction of God's vision of comprehensive optimal well-being as far as it can go under any set of circumstances. Participating in God's benevolent intentionality, faith 'struggles with God against God', as Martin Luther formulated it, *with* God's benevolent intentionality *against* the destructive power found in God's creation.

Science tells us that the end will be the end, rather than a perfect state. We must accept that. It is not due to the devil; it is not due to human sin; it is programmed into the system. The struggle of faith 'with God against God' may seem to be incoherent, if we were busy creating a metaphysically consistent system. We are not. As experiential realists, we are analysing what happens in the reality we experience.

We experience, on the one hand, the ambiguity of the reality of which we are a part and attribute it to God's creative activity. We experience, on the other hand, the tenacious thrust of all of reality towards the realisation of potential, the struggle of all living things for survival and well-being, and the human quest for authenticity and fulfilment.

As believers we discern in this overall thrust the benevolent intentionality of God. We see the majesty of God in creation (Romans 1:20) and we see the glory of God's redeeming love in the face of Jesus Christ (2 Corinthians 4:6). The two aspects

do not exclude each other, but call for each other. Creative power calls for meaning and purpose; redeeming love calls for concrete manifestations in the world we know.

## **The struggle of faith is backed up by science**

Once again, this is everything but metaphysical speculation. It is the simple truth as witnessed in ordinary life and as exposed by the sciences. Science can teach us that, if you want a world, a world of the kind that we experience, you have to put up with both entropy and gravity, with both regularity and contingency.

You have to put up with situations far from equilibrium and situations on the edge of chaos; with the amazing fine tuning of basic parameters and catastrophic cosmic events such as the death of a star. If you want life, you have to put up with vitality and mortality. Otherwise you won't get it.

If that were not the case, we would have a different world. It is in this struggle that God becomes real for us as the transcendent Source and Destiny of reality, as creative power on the one hand and benevolent intentionality on the other.

The God of the Bible is not, therefore, an idealised abstraction of the Good, the True and the Beautiful, as in Platonism, but the mainspring of the creative and redemptive movement of reality into the future. It tackles all kinds of obstacles and vicissitudes on its way, without any guarantee that it will ultimately win the battle against depravity, suffering, death and destruction.

The insistence of believers that in the end it will be God's benevolence that will persevere over the necessities built into God's creation is a courageous act of faith, rather than a foregone conclusion. This movement strives towards an ever-dynamic vision of comprehensive optimal well-being.

God's vision is not pre-determined and fixed, as a speculative theology assumed on the basis of a Hellenistic concept of eternity. It is dynamic like a shifting horizon that opens up ever new vistas, challenges and opportunities, and that translates into concern for any deficiency in well-being in any dimension of life.

## **5. Creation by design**

There is a vibrant debate around the concept of 'creation by design' that creationists love to posit against Darwinist evolution. Apart from the Bible, creationists base their argument on the apparent efficiency and meaningfulness of the created order. Is it really thinkable, they argue, that this wonderful world emerged and evolved on its own without the guidance of a superior intelligence?

Darwinism is adamant that biological evolution happens through chance mutations that make certain organisms more (or less) capable of flourishing in certain environmental niches. To understand how this mechanism works requires no designer and no design. It happens automatically. But do the two positions really exclude each other? The problem might once again be located in our tendency to over-personalise a particular metaphor, in this case the concept of design.

There is no question that, following certain regularities, the universe functions magnificently. But who says that the presumed 'higher intelligence' is not built into the very regularities that allow the system to operate? Why not simply concede that the combination of causality and contingency, determinism and chance, regularity and freedom is precisely the way God's 'intelligence' manifests itself?<sup>35</sup>

Certainly humans, including believers, have no access to any information about God beyond what we experience, such as the assumed intelligence of God within 'God-self'. The models that the sciences find in, or select from, reality are models of experienced reality. They refer to the same divine 'wisdom' that post-exilic Judaism perceived to be the cause of the marvellous functioning of the universe and that the prologue to the Gospel of John calls the 'logos' underlying all of reality. We shall soon come back to that.

Let me use a metaphor. A farmer designs an irrigation project. He knows what he wants to achieve. He has some understanding of how water behaves when allowed to flow freely. He lays out a system of furrows, branching out to various fields, and installs automatic devices that open or shut particular waterways in response to the quantity of water flowing through it.

He then provides for a source of water and opens the tap to let the water flow through the system. It flows on its own, but only because he opened the tap. It flows in the desired direction, but only because the furrows were laid out in the correct way. He knows that the system is not perfect and that things can go wrong. He employs a team of workers to see whether furrows have a wrong gradient, break open, or get clogged. He constantly improves on the project as it unfolds.

We see from this example that intentionality and causality do not contradict each other, but presuppose each other. Intentionality must use causality to achieve its goals, because it can only become operative where causality operates. The same is true when engineers design a car or a missile.

The logical impasse arises when we over-personalise reality, as if there were *only* intentionality and agency, and no regularity; as if every event were the direct result of a personal decision, rather than the outcome of causal sequences or contingencies; as if intentionality and causality were not indispensable and inseparable dimensions of God's creative activity.

## 6. Information and communicative competence

To be a person also means the possession of communicative competence. If God is seen as a person, we can assume that God can address us personally through human agents and we can address God as human respondents. That is of constitutive importance for the biblical faith.

Language is symbolic communication and symbolic communication is part of human reality, thus part of nature. But personal communication does not exhaust the

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<sup>35</sup> Stephen Hawking, not exactly a believer, speaks of the natural world as the 'grand design'. Why not? Stephen Hawking and Leonard Mlodinow, *The Grand Design*. New York: Bantam Books, 2010.

concept of communicative competence. An aspect of reality whose importance is hardly ever recognised for the science-faith debate is the critical role that information plays in the cosmic process as a whole.<sup>36</sup> Human words and gestures must be seen in the greater context of information flows, which are of critical importance at all levels of reality.

From rudimentary beginnings at the subatomic level, the evolutionary hierarchy of emergences led to ever more complex forms of ‘messaging’. Fields represent systems of information. Protons and electrons ‘click’ into a relationship with each other. Ionised chemicals ‘find’ each other to form new molecules. Information plays a constitutive role in the formation of amino acids and their combination to form organic life forms.

At the level of living organisms, information becomes incredibly complex. Electric impulses travel through nerves and chemical substances travel through the bloodstream. At the level of personhood, information reaches the versatility of human language. Without human communication, social structures and processes are unthinkable.

The point is that we have a hierarchy of information flows that follows the hierarchy of emergences pretty closely and that represents an evolutionary continuum from the most rudimentary to the most sophisticated. What begins as subatomic probability proceeds through physical and chemical causality, biological teleology, instinctual hard-wiring and personal communication to end up in mass communication as the prerequisite of social formations.

Communication is a transfer of information; all information conveys some meaning within its particular context. If God is deemed the Source and Destiny of this entire process, it would be arbitrary to assume that God had no communicative competence. Language is one of the defining characteristic of personhood, yet it only constitutes a particular form of information transfer embedded in the much larger sphere of impersonal information flows.

Intuitively, this fact has already been realised in pre-scientific times. Dynamism, animism, polytheism and theism suspected that information flows, often wrongly interpreted in terms of intentional communication, determine reality. They may have over-personalised these information flows, but the impersonal aspect has always been recognised, at least to some extent.

In post-exilic Judaism, sages went beyond the anthropomorphic metaphors of earlier times, when God’s personhood was simply taken for granted, and attributed the awe-inspiring complexity and efficiency of the universe to the ‘wisdom’ of God (Prov. 8:22-31; Sirach 1:9 ff; Wisdom of Solomon 7:22 ff). Wisdom translated into structures and processes; otherwise it would be pointless.

The idea was taken up in the first chapter of John’s Gospel. Harking back to the ‘Word of God’ as imperial decree in Genesis chapter 1, to the ‘Wisdom of God’ as God’s instrument of creation in Jewish Wisdom literature, and to the concept of rationality in Greek philosophy, the *Logos* of God is taken to be the inner rationale and dynamic power underlying the universe as a whole.

It is this divine intentionality that ‘became flesh’. It manifested itself in a human life with its peculiar intentionality and agency. It operated within its own social, cultural and religious

<sup>36</sup> See W. Gitt, *In the Beginning Was Information: A Scientist Explains the Incredible Design in Nature*. Green Forest, AR: Master Books, 2006. The book is instructive in terms of information science, the author’s field of expertise, but totally out of step with academic exegesis, hermeneutics, and main line theological insight. One cannot rescue faith assumptions on the basis of a demonstrably untenable approach to the Bible.

context. John characterizes this intentionality in formal terms as 'life', 'light', or 'truth', but then determines its qualitative content as 'grace' or love'.

These terms are intensely personal. They proclaim God's benevolent intentionality that manifested itself in 'the flesh', that is, in Jesus of Nazareth, a human being acting as the messianic 'Son of God' (John 1:1-18). God's person manifested itself in the person of this human being.

When God intervenes in reality on our behalf, does 'he' act as *one* factor among others within this reality, or can 'he' act *through* all such factors, or does 'he' have to *suspend* natural law to act?

## Section IV

### God's creative and redemptive action

#### 1. God's creative power is universally at work

So far, we have dealt with the creative power of God, as revealed by the sciences, and the benevolent intentionality of God, as proclaimed by faith. These contentions have important repercussions for the way we see God acting in the world we know and how we might be involved in this action. It concerns the past, the present and the future.

If the concept of God denotes the transcendent Source and Destiny of reality as such and as a whole, this implies that God's creative power is at work throughout the entire hierarchy of emergences, from energy fields to galaxies, from bacteria to humans, from instincts to social structures.

#### 2. Two Gods?

That God is the mainspring of all of reality has been asserted by both biblical and classical theology, but the tension between the experienced ambiguity of reality and the proclaimed benevolence of God cannot easily be resolved.

If God is taken to be the transcendent Source and Destiny of reality, God's creative agency must necessarily cover evolution and entropy, life and death, the beneficial and the detrimental, the meaningful and the meaningless—simply because this ambiguity is part of the reality we experience and that we attribute to God, its transcendent Source and Destiny.

Biblical realism, though pre-scientific, bears that out: 'Who commands and it is done? Is it not from the mouth of the Most High that good and bad come?' (Lam.

3:7) ‘For from him and through him and to him are all things. To him be the glory forever’ (Rom. 11:36). ‘In him we live, move and have our being’ (Acts 17:28).

A God deemed responsible only for the creative and beneficial aspects of reality would necessitate the assumption of a second divine agency, such as the devil, equipped with commensurate destructive power. Scientific cosmology shows that this assumption is no solution for the problem of evil, because reality is a single, integrated process, where evolution could not take place without entropic dissolution. What seems to be a negative aspect seen from one perspective may seem a positive aspect seen from another perspective.

The idea of two divine principles also militates against the basic commitment of the biblical faith to only one God. This fact may reflect a pre-scientific intuition that reality is one integrated whole. Talk of the devil in the Christian tradition should therefore be treated as a mythological expression of the ambiguity of reality that we all experience, rather than the assumption of two quasi-divine beings opposed to each other.

Ancient Israelite faith juxtaposed the righteous *God* and the sinful *people* of God. It did not accept the existence of two divine entities. The earliest myths depict God’s creative activity as a victory over the forces of chaos and destruction, variously depicted as darkness, the primeval ocean, disorder, lawlessness, Leviathan, Behemoth—or God’s own wrath.

A post-exilic way of dealing with the problem was to integrate the force of evil as a necessary element in God’s mastery over the universe. In Job 1-2, *Satan* (the Hebrew word for accuser) functions as the public prosecutor in God’s government. His task is to test the integrity of believers. Being overzealous, he tries to trick them into wrong attitudes, decisions and actions (Job 1-2).

In a New Testament sequel to this story, *Satan*, the accuser, is demoted and replaced with Christ, the advocate (Rev. 12:7-12). This is the mythological version of what Paul’s expresses with his dialectic between law and grace. The law accuses, while grace forgives. God’s forgiveness supersedes God’s condemnation.

In contrast, the Parsist religion, with which the Jews came into contact during the time of the Babylonian exile, posited a good god (*Ahuramazda*) with his army of angels and a bad god (*Angra Mainyu*) with his army of demons. The current stage of world history was characterised by a perpetual conflict between these two forces, humanity being caught up in the crossfire.

The ‘present age’ would come to an end in a giant showdown, the battle of *Armageddon*. The bad god, his army of demons and his human supporters would be vanquished and eradicated in a pool of fire. There would be no evil in the age to come. Stripped of its mythological garb, the core message of this narrative is that *evil has no right to exist* and must be tenaciously resisted and overcome wherever possible.

Parsist dualism seems to be a neat solution to the problem. It had a considerable impact on the Jewish-Christian faith. In some post-exilic developments, for instance Apocalyptic, the Qumran sect, and the Book of Jubilees, the influence is tangible. Jubilees developed a formidable concept of the devil as a hostile power (*Mastema*).

The idea is also reflected in many New Testament statements. The ‘evil one’ was depicted as the ‘prince of this world’, Satan, the devil, or something similar.<sup>37</sup> All these versions say

<sup>37</sup> Names and conceptualisations of evil abound in the biblical tradition: Satan, Belial, Beliar, Mastema, Asasel, Sammael, Lucifer, Baal-Sebul, diabolos, demiourgos, antidikos, Anti-Christ, the enemy, the old snake, the dragon, the evil one, the tempter, the god of this world, the prince of the world, the strong one, flesh vs spirit, an army of demons vs an army of angels, last judgment vs redemption in Christ, everlasting shame vs shining like stars, fires of hell vs heavenly bliss. All aspects of evil are covered.

essentially the same thing. It also found its way into a number of 'heretical' movements inspired by the Parsist and Neo-Platonic dualisms.

However, the main stream of the Israelite-Jewish faith resisted such a distinction, claiming that God was the transcendent Source of reality as a whole and that nothing could exist or happen without God's power and God's will (Job 2:10; 9:12; Ps. 104:29; Lam. 3:37-38).

The human body and the human spirit are inseparable dimensions of the wonderful creation of God. They can only survive and flourish together through God's life-giving agency. They can both be abused. They can both deteriorate and decay.

### 3. God is not a factor within reality

Faith intuits God's creative action as the precondition for the existence and functioning of reality as such and as a whole. This intuitive certainty has a fundamentally important implication: God is not part of this reality, but its Source. God is also not an agent within this reality that could cooperate or compete with other such agents, but the Mainspring of all such agents.

The concepts of God and the world cannot be projected on to the same level without losing what they stand for. The popular assumption that God is active in some events and absent in others leads straight into superstition.

My use of the metaphor of a trumpeter and her trumpet often led to humorous discussions with my students. Does the trumpeter make the noise or the trumpet? If it is the trumpet, can we have the music without the trumpeter? No, it is the trumpeter who produces the music. If it is the trumpeter, can we have the music without the trumpet? No, again there will be no music!

So 50 per cent of the music is produced by the trumpeter and 50 per cent by the trumpet? No, you cannot have half a music. Take either the trumpeter or the trumpet away and you will not be left with 50 per cent of the music, but with no music.

It follows, then, that the trumpeter makes 100 per cent of the music and the trumpet makes 100 per cent of the music. Do we then have 200 per cent of the music? No, only 100 per cent. This would be impossible if the trumpeter and the trumpet operated at the same level of causation. They cannot cooperate with each other or supplement each other. The fact is that the trumpeter produces all the music *through* the trumpet.

God's power does not render humans powerless, but empowers them. God's wisdom does not stupefy humans, but wises them up. God's initiative does not make our initiative redundant but triggers it. When we are involved in God's redemptive project, we become participants in, and instruments of, God's own action, nothing less and nothing more.

In the same way, inner-worldly causality, as observed by the sciences, does not indicate the absence of divine causation, but manifests it. The evolutionary mechanism of mutations surviving and thriving better than others in particular environmental niches does not demonstrate the absence of divine creativity, but its effective presence.

We see now why the biblical authors felt no contradiction when they argued that *God* hardened the heart of Pharaoh, yet *Pharaoh* hardened his heart—and was held responsible for doing so (Exod. 10:1-20). If God had not made Pharaoh's attitude and action possible, it could not have happened in the first place.

Isaiah says ‘. . . all *we* have accomplished, *you* have done for us’ (Isa. 26:12). Similarly, Paul admonishes us to ‘work out our salvation with fear and trembling’, *because* (not ‘even though’) God makes it possible for us to want and to act (Phil. 2:12). Indeed, without God’s action, we could not even want to act.

## The God of the gaps

God is the transcendent Source and Destiny of reality as such and as a whole. This assumption rules out the idea that God set the world process going, then stood back and allowed the cosmic process to function on its own. This is the position of the Deists of the nineteenth century. It can be augmented by saying that God intervenes at critical junctures to help it cross a threshold or to lead its operation in a particular direction.

This idea has been applied in particular to the gaps that still exist in the scientific explanation of how reality has unfolded. We do not know for certain, for instance, what exactly triggered the big bang, how life emerged out of lifeless material and how brain functions could lead to consciousness. So, if there is no explanation for these events, is that not a proof that God intervened?

No, it is not! On the contrary, the idea has done serious damage to the credibility of the Christian faith. Whenever a scientific discovery closed such a gap in our knowledge, the assumption of God’s agency became redundant, at least for that particular instance. If you buy into this argument, scientists may eventually be able to close all the remaining gaps and take this as a proof that the idea of God itself is redundant, because reality can be explained perfectly well without it. Many prominent scientists have indeed come to that conclusion already and abandoned faith in God altogether.

However, this conclusion is based on a serious misunderstanding of what the concept of God stands for. God is the Source of the entire causal network, including the aspects we know and those we do not know. It is also a misunderstanding of what faith is all about. Faith is not about the explanation of how reality functions, but about our relationship with God, the ultimate Source and Destiny of this reality.

I may note in passing that there is a long-term research project in science and religion on ‘non-interventionist direct divine action’.<sup>38</sup> It explores the cosmic process in search of spaces in the causal network that would allow God to intervene in particular instances without suspending or overriding the laws of nature. In my view, this is a sophisticated version of the God of the gaps.

Why should God need such open spaces to intervene in the first place? Why can God not act through the regularities God entrenched in the reality God created? If that were impossible, God’s action would compete with causality rather than being the Source of causality. God does not just *intervene*; God brings about *everything* that exists and happens.

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<sup>38</sup> R. J. Russel, Nancy Murphy, and William R. Stoeger (eds), *Scientific Perspective on Divine Action: Twenty Years of Challenge and Progress*. Vatican: Vatican Observatory Publications/Berkeley, CA: Center for Theology and the Natural Sciences, 2008.

## The miracle story

Our understanding of what constitutes a 'miracle' is closely related to the question of whether God filled in the gaps that our knowledge of causal networks in the world left open. In both cases, it would seem that God's actions were not mediated *through* the regularities we observe in reality, but were unmediated, *direct* acts. In both cases, this would mean that God acted as a factor within the world process on par with other such factors, rather than as the Source and Destiny of the process as a whole.

Scientists have problems with the assumption that God intervenes in response to prayer and does so by suspending or overriding the regularities that govern immanent processes. Events experienced in reality then appear as wilful acts of the divine person, rather than as outcomes of unfolding immanent processes. In the view of science, this is plain superstition. It is essential, therefore, that we gain clarity on what believers mean when they speak of miracles.

Science recognises that there are irregular, unpredictable and extraordinary sequences of events. There may be indeterminacy and probability at the quantum level. There may be contingency, chance and random. There may be sensitivity to initial conditions and non-linear processes. But all these instances do not suggest a personal divine subject who is free to suspend or override regularities in nature, who intervenes in the process in response to prayer, or who punishes evil-doers with natural calamities and rewards the righteous with natural blessings.

To link up with scientific insight, faith and theology must sober up in this respect. The alternative view is that, as we move into the future, a range of possible directions and outcomes open up, only one of which can be realised. Unlike the creations of myth or vision, however, actual potentialities are embedded in reality. They are constrained by the parameters laid down by the past.

Given the way God constructed the universe as we know it, surprising things happen all the time, because the past always allows for a range of potential futures. Given our limited insight, we cannot always anticipate all of them. Many things are in fact possible that we would never have believed were possible. The amazing advances of science and technology in recent times demonstrate this fact.

But not everything is possible—not even for God's own creative and redemptive intentionality! In fact, it is precisely God's creative and redemptive intentionality that precludes arbitrary interference in the regularities found in reality. Natural laws are essential, because without them, reality would not be able to exist and unfold. They are God's laws. They are expressions of God's benevolence. They are valid.

Reality is a highly integrated system of relationships. There are indeed under-determined, perhaps even non-determined spaces in this system. But to suspend just one of the laws of nature, even just this once, could create a giant mess. This happens even within the tightly regulated reality we know. Seemingly insignificant events such as a crow scratching in the snow on a mountain ridge can lead to massive consequences such as an avalanche killing hundreds of people.

Or witness how quickly developments can spin out of control when one component breaks down in an automated factory, when one sleepy driver does

something foolish on a busy highway, or if somebody—God forbid!—accidentally triggered a nuclear weapon! Being concerned about the well-being of the universe as a whole, God is not likely to suspend these laws just to satisfy our petty needs and desires.

## **Are events only miracles when they are beneficial for us?**

The idea of God's specific intervention also undermines the internal coherence of the Christian faith. If there were no constraints in the way of a powerful and loving God, it would be unintelligible why the new world without death and tears, expected by Jewish and Christian authors in New Testament times, should not have materialised a very long time ago. This is the problem of theodicy that we have discussed above.

Naive spirituality typically claims that desired or beneficial events occur because of special divine interventions. But what about occurrences that are equally inexplicable, yet detrimental or highly undesirable? Are they also due to the direct interventions of God? If so, why should God act in this disturbing way—perhaps to punish or to humiliate us? And if so, would that be the kind of God whose redeeming love we proclaim in the gospel?

If these events are not to be attributed to God, was God asleep when they happened? Or is God indifferent when we suffer? Or is there perhaps a counter-God, the devil, or 'the prince of this world', who is actually in charge of reality? Has God perhaps abandoned his rule to such a rival? Or is satanic viciousness capable of outwitting and outperforming divine benevolence? We have dispensed with this possibility above.

According to the Bible, the transcendent manifests itself *through* the immanent—a fire, a drought, a victory, a great fish, a desert wind, the wisdom of a king, or the prowess of a military commander. These specific 'interventions' are nothing but unexpected, spectacular and awe-inspiring manifestations of God's overall creativity and benevolence—whether positive or negative. But the latter also include the operation of the laws of nature.

## **The linguistic character of the miracle story**

We have to recognise that the miracle story is a linguistic tool, found in many religions and world views, to witness to the power, glory and benevolence of the divine, whatever it may be deemed to be. A philosopher once said that the miracle is the most beloved child of faith.

Let me remind you of what was said in chapter 5 about the character of the biblical documents. Their authors knew nothing of the criteria of truth that we inherited from the Enlightenment, that is, empirical evidence, mathematical stringency, plausible historical conjecture, or consistent rational argument. They used all the linguistic tools available to them to witness to the power, glory and benevolence of God.

As a tool for expressing an underlying truth, the miracle story is similar to myth, legend, parable, metaphor, poetry and fiction, all of which do not necessarily refer to incidents that happened literally as recorded in history. They are meant to express profound insights of faith. Whether they actually happened or not is not the prime consideration of their authors. Such stories can be appropriated again and again in new situations. Jesus was calming down the storm—can he then calm down the storm of my emotions, of our family conflicts, of industrial turmoil, of a civil war?

Because it wants to highlight the majesty, power and benevolence of God, the miracle story tends to resort to supernatural interpretations of actual experiences. Authors may even invent such narratives—and do so in good faith. Parables are also invented to convey a theological truth. Moreover, when such a story is retold again and again, its miraculous character tends to grow. All this should neither surprise us nor deter us from taking both their rationale and their message seriously.

### Here are three examples:

(a) In Exodus 14:13-32, we find two accounts of the passing of the Israelites through the Red Sea. They have been so loosely integrated with each other by a later editor that they can easily be disentangled.

According to the older account (probably belonging to the 'Yahwist Source'), Yahweh utilised natural forces to rescue the Israelites. During a tidal ebb, the sea retreated sufficiently to lay the shallow bottom of the sea bare. A desert wind dried it up sufficiently for the Israelites to move across. When the Egyptians tried to pursue them, the heavy wheels of their carriages got stuck in the mud. The fall of night brought about a darkness that confused their sense of direction. They moved straight into the water of the returning sea and drowned.

In the second story, belonging to the Priestly Source, Moses divided the sea with his staff in such a way that it stood on both sides like two walls until the Israelites had gone through. When the Egyptians moved through this corridor, however, Moses closed the sea, again using his staff, and they all drowned. This version is part of a theologically based use of the image of passing through water by the Priestly Source. But it also represents a dramatic growth of the miraculous character of the story if compared with the older version.

(b) Second generation Christians were eager to portray the ministry of the apostles as a continuation of the ministry of the earthly Jesus. His proclamation of the coming Kingdom of God and the concrete enactment of his message in the power of God were both transferred to the acts of his disciples (compare Matt. 9:35-38 with Matt. 10:5-8). That is why you find the same kind of miracle story in the Acts of the Apostles (e.g. Acts 3:1-11; 9:32-43).

(c) Any reader of John's Gospel will be struck by the effort of the author to portray the redemptive acts of Jesus as highly unlikely events. Just think of the change of water into wine (John 2:1-12), or the raising of Lazarus from the dead after his body had already started to decay (John 11:44). These two stories are not found in the (older) sources of the synoptic Gospels. This would be quite extraordinary if they had actually happened. John also explains very explicitly why he tells such stories, namely to create faith in Christ (John 20:30 f).

It is significant that, in spite of the frequent usage of the miracle story in the New Testament, we also find quite a substantial critique of people who rely on miracles for their faith (1 Cor. 1:22-25; 2:1-5; John 4:48; 20:26-29). This shows that the accounts of supernatural or miraculous events were never meant to provide a foundation for the Christian faith, but rather functioned as an expression of faith in God's creative power and God's redemptive love.

## Are miracles then impossible?

Not at all! ‘Miracles’ do happen all the time. I have experienced countless miracles during my own life, some seemingly insignificant, some quite dramatic. Miracles are unexpected and extraordinary events within the world process that provoke amazement, trepidation and gratitude. They are often experienced in the wake of a serious ‘struggle with God’. As Jesus said, a strong faith can move mountains. Such instances draw the attention of believers to God’s creative and redemptive intentions and actions.

But for miracles to happen, God does not have to suspend or override the regularities that guide the cosmic process. God can also *utilise* these processes and regularities. Miracles do not have to explode the limits of what God has made possible within the structures and processes of the universe; they happen because God *uses* these possibilities for God’s overall purposes. In fact, trust in God could be defined as the assurance that God will do for us and through us whatever can be done under particular circumstances.

Even trust in *human* agency does not believe in supernatural quick fixes. I do entrust myself to the ingenuity and reliability of the captain of an airliner or a surgeon operating on my heart. But this kind of human agency can only operate *through* immanent processes and *because* the laws of nature are reliable. Within these immanent constraints, the range of possible and unexpected occurrences is amazingly wide, but without the parameters set by natural laws, they could not happen at all.

In our breathtaking times, this has become abundantly manifest. What was deemed unthinkable only a few decades ago—instant global communication, space travel, organ transplants, access to whole libraries through the Internet—has become commonplace today. The miracles of modern technology surpass those expected by our ancient forefathers in the faith by far.

There are multiple feedback loops between all levels of emergence, leading to extremely complex networks of downward, upward, whole-part, part-whole and part-part causation. What happens in my stomach can upset my capacity to concentrate and make me fail an examination. The chemicals at work when highly placed leaders fall in love can upset whole societies and steer history in problematic directions. Faith attributes this entire evolving network of forces and relationships to the power and benevolence of God.

And it is within this context that extraordinary events happen—positive and negative—everywhere and all the time! In fact, the whole of reality is a miracle. There is no law of nature that says that the cosmos we know had to come into existence. The amazing ‘fine-tuning’ of the universe shows that the probability of having come into existence in its present form approaches zero.

Scientists agree that there could have been any number of alternative universes if the initial conditions had been different. This is also true for each level of emergence. The tiniest variation in successive initial conditions would have led to totally different outcomes. But all this happens within the constraints of the regularities that characterise the flow of the cosmic process.

Take your own life. Counting all the factors that had to be right, from the big bang and the fine tuning of the universe onwards, the odds that you would have come into existence as a healthy human being were virtually zero. I will expand on that fact in the last chapter. And yet you do exist and read these lines. Is that a miracle or not? Does it merit humility and gratitude? Does it not evoke awe, respect and praise? I think so.

## How meaningful is it to pray?

There are many ways of trying to be in touch with one's ultimate foundations. If prayer refers to verbal communication, however, it presupposes a personal Other, even if that may only be a personified impersonal object—a fetish, a sculpture, a monument, an animal. Christian faith is unthinkable without a personal relationship with God, represented by Christ, the 'icon' of God's benevolent intentionality.

We have seen that the theory of emergence backs up this certainty. Personal relationships express themselves in the form of communication. God speaks to us through the words, attitudes, actions and body language of fellow believers; we respond in prayer, rituals, hymns, or silent openness to the presence and guidance of the transcendent, again within a living community of believers.

But do prayers actually 'work'? On the one hand, it is not at all unthinkable that God would respond to prayer by 'opting for' a particular future from the wide range of potential futures that every new situation opens up for us. God would probably do so acting *through* God's creation, including our healthy senses, drawing our attention to unnoticed possibilities, mobilising our resources and strengthening our resolve to make them happen.

Once again, I want to emphasise that miracles *do* happen. I know that because I have experienced miracles in countless instances and in very concrete terms. God does indeed seem to respond to ardent prayer. That is also why a hope that seems to transcend what currently seems possible is meaningful, effective and, in fact, indispensable. The question is not whether miracles happen, but how they happen.

On the other hand, the Bible warns us not to 'tempt God' (Deut. 6:16; Matt. 4:7) by expecting God to be our little handyman who will suspend the regularities of the universe just to fulfil every trivial need and desire or fix every breakage in our lives. The regularities built into the system are valid. We are not free to assume that they can simply be suspended. As far as we know, this world cannot function without the entropic process. Life cannot exist without death. Without causality we could not act at all.

This is also important for the economic and ecological problems this book began with. We can rest assured that God will not provide another planet with another set of regularities after we have messed up this one—not because in 'his' unfathomable grace God would not want to do that, but because God would have to start from scratch with the big bang and it would take another 14 billion years to get us where we are now.

That should certainly sober us up. The idea that 'nothing is impossible for God' is speculation if it does not refer to what God has *actually* made not only possible, but real, and what God is still making possible and real day by day. God's omnipotence

is located in the power that the universe actually displays, and in the regularities and potentialities that determine the behaviour of this power, not in our wishful thinking.

Prayer does not have to consist in a lot of words, as if we had to inform God about something God does not know (Matt. 6:7-8). It certainly helps when we try to articulate a vague or complex concern. In essence, however, prayer is placing ourselves consciously before God and allowing the light of God's creative and redeeming love to penetrate our lives in the context of our life worlds. When we pray, we own up to our dependence, our inadequacy and our enslavements. We allow ourselves to be liberated, empowered and motivated. We do not expect God to serve our interests, but make ourselves available for God's project in this world.

### **Reader reaction**

Can you confirm, critique or augment my view on the character of 'miracles'?  
Do you think that the explanation of the existence of evil in the world offered above avoids the really tough questions?  
How would you summarize my contentions and your response for a high school student?

## **Let us summarise**

The reality that the sciences explore is the world that believers deem the creation of God. Therefore, believers should embrace modern scientific insight as revelations of how God actually brings about the world of which we are a part. I used the term 'the real God' for the latter.

The following scientific theories seem particularly significant for faith and theology: big bang cosmology, entropy, emergence and biological evolution. We left aside (for now) those that do not seem to require theological re-conceptualisations.

The 'true God' refers to the benevolent intentionality of God that is not experienced but proclaimed on the basis of the biblical tradition. 'Creation in the beginning' and the 'end of the world' refer to God's creative power and ultimate sovereignty, rather than scientific accounts of probable origins and destinies.

The proclamation of God's benevolent intentionality refers to what ought to become, rather than what has become and will become. God's vision gives orientation to our lives, involving us in God's creative and benevolent project in the world.

Putting their trust in the proclamation, believers are able to discern God's benevolence even in the ambiguities of the reality we actually experience. Thus, entropy is essential to provide the energy needed to keep the cosmic process going and death is essential for the maintenance of life.

Because the impersonal aspects of the cosmic process do not suggest a personal Creator, the assumption of faith that God is a person is difficult for scientists to

accept. The theory of emergence suggests, however, that God must be thought of as a person simply because personhood is part of emergent reality.

This consideration can be deepened by reflections on communication and information theory. However, as the transcendent Source and Destiny of all levels of emergence, God must be thought of as much more than a person, just as humans are much more than persons.

Emergence theory can also help faith and theology to resolve the intractable problem of theodicy—the question of how a powerful and loving God can cause or allow evil to exist. Impersonal levels of emergence necessarily follow their own regularities; otherwise reality would not be able to function.

Faith is an obstinate struggle to maintain a sense of God's benevolence against all evidence to the contrary. Based on the proclamation of the cross of Christ as a paradoxical manifestation of God's redemptive concern, it recognises God's benevolent intentionality in the thrust of all living creatures to survive and prosper against all odds.

If God is our name for the transcendent Source and Destiny of reality, we need to include beneficial and detrimental occurrences in God's 'creative activity', rather than assume the existence of an evil counter-god.

We must also resist the temptation of visualising God as a factor within reality rather than the Source of all these factors. This stance excludes the assumption of God's interventions at places in the causal network not yet explained by science (God of the gaps).

It also necessitates an understanding of the 'miracle' as an unexpected and awe-inspiring event that may prompt our humility and gratitude, but that does not necessarily imply the suspension of the regularities that God built into the reality we know.

Prayer is meaningful because it places our situation before God, opens our eyes and minds to the range of options opened up by the future, and motivates us to take bold decisions and actions. This range of possible outcomes may allow a change of direction, but we are warned not to 'tempt God' by expecting the impossible.

# 8

## The ‘real’ humanity of science and the ‘true’ humanity of faith

### Reader reflection

In what ways do you think is the human being a biological animal similar to dolphins and apes, and in what ways are humans unique?

If Genesis 1 says that humans were ‘created in the image of God’, does this imply that God must be a biological animal, or that humans are divine, or purely spiritual beings?

Can a sick or handicapped human being be a ‘true’ or authentic human being?

### What this chapter is all about

In the previous chapter, I distinguished between the ‘real God’, whose creative activity we experience and the sciences explore, on the one hand, and the ‘true God’, whose benevolent intentionality is proclaimed by the Christian faith, on the other. It is clear that the concept of the ‘true God’ introduces a qualitative dimension that is not present in the more general concept of the ‘real God’.

Correspondingly, we now have to distinguish between the ‘real human being’, who is part of God’s creation alongside other biological organisms, on the one hand, and the ‘true human being’, who is proclaimed the ‘image of God’, that is, the representative of the ‘true God’ on earth, on the other hand. Again, the word ‘true’ introduces a qualitative dimension.

Given the criteria of the concept of the ‘true God’ that we proposed above, all human beings are ‘real human beings’, but they are ‘true human beings’ only potentially. They *can* live in fellowship with God and become involved in God’s creative and benevolent project. But this potential must be realised to become effective. Christians believe that this happens when we participate in the new life of Christ.

## Section I

### The 'real' human being as a biological creature

The human being is a biological species among trillions of others. It has come on to the scene towards the tail end of cosmic history. Yet there can be no doubt that it is a very unique species. Science and faith represent typically human endeavours that are found in other animals only in very rudimentary forms. Both these endeavours serve specifically human interests, whether material, social, or spiritual.

For the relation between science and faith, it is important to understand what it is that makes the human being human in the eyes of science. Science can help faith to gain a more appropriate picture of what happens in the body and brain of a human being than the intuitions of a pre-scientific biblical and theological tradition could provide. This includes the phenomenon of faith.

#### 1. The beginning, duration and end of human life

The picture of the human being painted by the sciences is realistic and sobering. As part of creaturely reality, humans are subject to the processes of emergence, evolution, deterioration and decay. This is true for both the individual and the species. The individual can 'beat death', at least for a time, through the constant import of low entropy energy (food) and the regular replacement of worn-out body cells. The species can do the same, again at least for a time, through procreation. But neither the individual nor the species can live forever.

Within their lifetimes, individuals undergo stages of development from foetus to full maturity, persist for a time, then deteriorate through ageing, and finally disintegrate when they die. As a species, humanity has not been on earth forever and is not likely to be around forever. The vast majority of all species that ever existed have since died out and humanity cannot expect to escape that fate.

Seen in the context of the great sweeps of history, every individual human being pops into existence through the coincidental convergence of a vast network of causes that go back at least as far as the big bang. By the same token, every individual human being drops out of existence, leaving behind a trail of consequences that will continue at least up to the disappearance of all life on earth, though progressively diluted by the consequences of other such events.

This is true both for the biological and the spiritual dimensions of life. Every individual human consciousness emerged from the ongoing world process and will 're-merge' into the ongoing world process. Like all biological creatures, humans are mortal. That is self-evident. But science has taught us to be more realistic about death than we used to be. Everything that makes up our human nature is a product of past history and drops into past history when we die. In chapter 10, we shall deal with the theological consequences of this insight.

## 2. The organism seen from the inside

The existence of the human being presupposes all lower stages of emergence from fields and quanta upwards. Because they have been dealt with in the previous chapter, I will skip the lower levels and begin with the levels that are typical for the human being as a biological creature.<sup>39</sup>

Imagine that there are about a million different types of proteins in the human body, all interacting with each other! They constitute the building blocks of cells. We have about ten thousand trillion cells in our bodies. They are of about 100 different kinds. Cells are the building blocks of organs. Organs make up organisms. There are trillions of organisms around, each with its own self-contained organic integrity.

What is it that keeps this vast bunch of components together and allows it to function in a coordinated way? Part of the answer is that every single cell is based on the same genetic code. The genetic code is an information system that generates a host of subsequent information systems leading to different kinds of cells, organs and processes that operate in the body. From the pool of potentially active genes, different clusters are switched on to produce particular tissues—bones, muscles, brain cells, etc.—in a coordinated way to produce the body as a whole.

At the most basic level, therefore, the organism functions through a constant transfer of *information* across an immensely intricate network. This network is constituted by two essential channels of communication.<sup>40</sup> There is an *emotive* system that determines how we feel and a *motor* system that causes different parts of the body to function in response to messages received. The two are coupled by multiple feedback loops.

Against this background, life can be described as an uninterrupted and all-inclusive information network. The flow of information within the organism involves two kinds of messengers. The first is the *neural* network. It transmits electrical signals of very short duration (a few thousands of a second) called *impulses*. Such impulses are transmitted between adjacent cells along certain neural pathways and target particular regions of the body.

The second is the *endocrinal* system. It transmits messages through chemical substances called *hormones* that flow along the bloodstream through the entire organism. They take much more time to do so (minutes or hours). There is an intricate feedback system in which hormones either enhance or curtail their own secretion to stabilise the internal milieu.

### Internal stability

The emotive system, responsible for what we experience as ‘feelings’, regulates the interaction between the external environment of an organism and its internal environment. The *external environment*—temperature, light, the presence of oxygen, physical impacts, sensual impressions, and so on—is subject to considerable variation, and the organism has to respond by trying to keep its *internal environment* relatively constant, a condition called *homeostasis*.

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<sup>39</sup> As in the previous chapter, I utilise material from Klaus Nürnberger 2011. *Regaining Sanity for the Earth—Why Science Needs Best Faith to be Responsible, why Faith Needs Best Science to be Credible*. London: Xlibris Corporation / Pietermaritzburg: Cluster Publications.

<sup>40</sup> Suggested reading: Vincent Jean-Didier, *The Biology of Emotions*. Edinburgh: Blackwell, 1990.

It is the disturbance of the inner environment that makes us feel either great or miserable. To return to the desired balance, fluids are secreted that cause a sense of *attraction* for something needed to restore the balance or *aversion* against something that disturbs the balance. The same external stimulus, for instance, the smell of food, can cause attraction or aversion depending on the state of the inner environment, for instance, whether the body has a surplus or a deficiency of energy.

*Pleasure* and *pain* are, therefore, emotive expressions of the most basic mechanisms that keep the organism intact. This has immediate theological repercussions. Our sense of a discrepancy between what reality ought *not* to have become and what reality *ought* to become is based on neurological and hormonal processes in our bodies triggered by our brains.

This implies that spirituality is not divorced from biology, but based on biology! It is a typical example of emergence. In theological terms, God brings about our desire for an authentic and fulfilled human life through the activation of nervous impulses and hormonal processes.

### 3. The brain

Evolutionary biologists see the emergence of the brain as a special case of the adaptation of species to their respective environments, a process which drives the evolutionary process forward at the biological level. There may be unfathomable intricacies in the formation of this particular organ, but the appearance of the brain does not represent a break in the evolutionary process; it just constitutes a higher level of emergence.

Higher organisms are capable of goal-directed movements, which necessitate the presence of a command centre and a system of communication. The nervous system and the endocrinal system are critical components of higher forms of animal life because they form the communications network that conveys information from a pivotal centre, the brain, to more peripheral parts of the organism and vice versa. The increased versatility of higher animals is made possible by the information management and control afforded by a centralised brain.

In its turn, the brain provides the substratum for the emergence of a higher, much more complex set of patterns and processes that we experience as the subconscious, consciousness and self-consciousness, thus the personal dimension of reality. More traditional concepts include 'soul', 'spirit', 'personality', 'subject', and so on. Its complexity and versatility are truly mind-boggling.

#### The brain as the command centre of the organism

The brain and spinal cord make up the *central nervous system*, as opposed to the *peripheral nervous system* that connects it to the rest of the body. The latter consists of the *autonomous* nervous system, which regulates automated functions like

heartbeat and breathing, and the *somatic* system that conveys *sensory* messages from the sense organs to the brain and *motor* messages from the brain to the muscles.

The human brain is three times larger in relation to the rest of its body than that of other higher mammals. The human brain consists of between 50 and 100 billion ( $10^{11}$ ) *neurons*, which form about 10 per cent of the brain cells. The others, called *glial cells*, have a number of supportive functions, for instance, in the formation of synapses. Each neuron consists of a body (*soma*) and a root or trunk (*axon*). The axon can be as long as a metre and have a great number of branches (*dendrites*).

A special kind of connection, called *synapsis*, establishes the contact between the branches of different neurons. Each neuron is linked with others of its kind by up to 10,000 synaptic connections. When a neuron receives impulses from its environment it is charged up. When its charge reaches a particular threshold, it ‘fires’ an impulse that travels along its axon and dendrites and triggers the formation of a chemical, called a *neurotransmitter*. This chemical forms a connection with another neuron and sets off a corresponding impulse there.

We can see now why these biological processes are able to explain what we experience as ‘knowledge’ or ‘truth’. Large numbers of links between neurons form complicated structures or ‘circuits’ that are relatively stable, yet fairly malleable. These structures constitute our working knowledge of reality. The brain is constantly at work integrating new inputs from the environment, solving contradictions, and streamlining the overall pattern. A reasonably consistent and balanced structure is experienced as the ‘truth’.

The combined interaction between neurons can form unbelievably complex patterns and processes. Such synaptic structures can be switched on or off. Think of an irrigation system or the lighting system of a big building. You switch certain clusters of channels on or off. This can become automated by a supervening process, for instance, when a pianist performs certain sequences of notes virtually automatically. Such mechanisms settle in the subconscious through countless hours of practice.

If a system is switched off, the stored knowledge it represents can remain dormant in the subconscious for a long time. It can also be switched on very suddenly by certain triggers. A sight of a particular flower, for instance, can conjure up a romantic experience we had decades earlier. This is how certain memories flare up, how we become aware of pressing problems, and how we are challenged to respond to information in certain ways. Encephalograms (brain scans) can trace the location of such processes in the geography of the brain.

## The structure of the brain

As evolutionary biologists see it, the most primitive form of the brain evolved some 600 million years ago in a simple worm. This worm was structured like a tube, with a hollow cavity running from mouth to anus and a large nerve ganglion at the front. All its descendants have maintained this basic shape, including the human being. The human brain has various parts that have evolved successively in

pre-human evolution. They are fairly complex and we do not have to go into detail. Most important for our deliberations is the evolutionary sequence of three main parts of the brain:

- (a) The so-called *reptile brain* harbours our most basic survival instincts—feeding and breeding; fight or flight; hunger and thirst; activity and sleep. Instincts are hereditary arrangements of synapses in primitive areas of the brain that proved to be indispensable for the survival of the species. They function ‘mechanically’, similar to the change of colour in chameleons. Their patterns of behaviour are basically immutable, though they can be, and have been, modified or superseded by later developments in the brain. This observation will become important for our consideration of the impact of culture, religion and morality on human behaviour.
- (b) The *limbic system* is situated between the reptile brain and the neocortex, thus between ‘instinct’ and ‘intelligence’. This is the seat of emotions and motivations. It mediates the symbolic representations of the internal and the external world. In comparison with the neocortex, it is rather ‘irrational’. Its malfunctions, for instance during an epileptic seizure, can produce unpleasant emotions and sensations, absurd convictions and uncoordinated movements. This observation can help us understand, on the one hand, how religious ecstasies, abnormalities and pathologies come about, and on the other hand, why some people are capable of surprising levels of commitment and dedication to certain convictions and causes.
- (c) The *neocortex* is the seat of abstract thought, symbolic representation, language, anticipation, evaluation, reasoning, choice, self-control and planning. In the human being, the *frontal lobes* of the neocortex are more highly developed than in other primates, a fact that accounts for the superior quality of human intelligence and symbolic communication. The neocortex is also able to eliminate disruptive ‘noise’ (unnecessary and unwanted information flows) emanating from the internal or external environment, thus making concentration possible.

## The complexity of the brain

What we call the mind builds on the biological infrastructure of the brain but constitutes a new level of emergence. The estimated number of synaptic switches in the human brain varies between a hundred thousand billion (100,000,000,000,000) and a thousand trillion. They can be switched either on or off. Every single switch changes the state of the brain.

A switch between two points gives you *two* possible states—on or off. If you have three points, you get *nine* possible states. If you have four points you get *fifty-two* possible states. Now imagine what happens when you have a hundred thousand billion synaptic switches all interacting with each other!

This is a good example of exponential proliferation. As you increase the number of points in the system, the number of possible states of the system snowballs. In a relatively short time, it reaches super-astronomic proportions. The number of discreet networks and overall brain states is virtually infinite. Mathematical calculations suggest that there are more potential brain states than atoms in the universe! This is a massive number!

Moreover, as the mathematics of complexity has shown, these relationships themselves can develop incredibly complex, unpredictable and practically infinite kinds of patterns and feedback loops. This explains the unparalleled complexity, versatility and vitality that characterises human mental processes.<sup>41</sup>

## Section II

### Human consciousness

#### 1. The emergence of the mind

It is from this peculiar structure of the human brain that the phenomenon we call the ‘human mind’ emerges. It represents the constant flow of brain states within particular boundaries, following particular patterns, laid down by genetic heritage, early life conditioning and past experience. Is this a credible proposition?

Indeed it is. Have you ever wondered how a computer can use a series of zeros and ones (the digits of *on* and *off*) for a faithful reproduction of a Beethoven symphony? This happens with the limited digital computation invented by humans. Nature is characterised by an infinitely more complex system of information, interaction and communication than that.

The mind includes faculties such as intuition, observation, comprehension, meaning, conviction, value, norm, acceptability, authority, volition, intention, vision, agency, creativity, conscious decision and purposeful interaction. Again, some of these characteristics also appear in less-developed forms among higher animals. However, the human mind is the most complex phenomenon found in reality that we know of, surpassed only by the interaction of such minds in social conglomerations.

It is also the most subtle, the most versatile and the most unstable. Its complexity, volatility and unpredictability surpass those of more simple structures and processes such as those found in physics, chemistry, or biology by vast orders of magnitude. To appreciate that, compare the complexity, versatility and transience of human thoughts with crystals, chemicals, stones, trees and ant colonies.

It is at this higher level of emergence that God-consciousness is located. It should not surprise us that convictions, opinions, perceptions and motivations are so immensely varied and fickle. Natural scientists often become exasperated by the variability, fluidity and unpredictability of opinions, convictions and commitments.

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<sup>41</sup> Suggested reading: M. Mitchell, *Complexity: A Guided Tour*. New York: Oxford University Press, 2009, pp. 3-39.

Their own fields are so much simpler and more lucid. They love to point out the fact that scientific facts, theories and procedures are precise, measurable, universally understood within the science community and agreed upon across the globe.

What they overlook is the fact that spiritual reality is operating at a level of emergence that is more complex and versatile than the levels of minerals or amino acids by several orders of magnitude. To use this fact as an argument against the reality or validity of faith assumptions, as many natural scientists do, betrays a lack of comprehension of the complexity of the human brain and its vast resources and potentialities in comparison with those found at lower levels of emergence.

## 2. Body and soul

In spite of the immense variability of the mind, the theory of emergence tells us that consciousness is based upon the functioning brain, which is a biological organ. This means that no 'personality', or 'soul', or 'spirit', or 'self' could exist without the brain, thus without the body, as its infrastructure.

Particular patterns of consciousness emerge and evolve through the cumulative impact of genetic factors, the subconscious memory of past experiences, entrenched cultural assumptions, the flow of information and ongoing environmental impressions.

This seems to fly in the face of what Western thought and most other cultures have assumed for millennia. Can we really be so sure of that? Indeed we can. Brain functions can be manipulated. Moods can be changed through the injection or ingestion of certain chemicals. Drugs can influence cognition. The most potent of them can turn normal people into monsters that murder, rape and smash.

Motor functions can be set off by the stimulations of certain neurons. Brain scans can locate certain intellectual or emotional functions in the topography of the brain. Certain patterns of behaviour can change or lapse due to a stroke or the excision of relevant areas from the brain.

Previously ingrained memories can be lost when the brain deteriorates in old age. Injuries to the brain or brain disorders can impair intelligence, disrupt the flow of memory and change personality. Death is described by biologists as the absence of brain activity—a condition that can be established empirically.

Near-death experiences, which suggest the 'soul' leaving the body and moving to a sphere of beauty and harmony, do not prove that these experiences are not produced in the deeper regions of the brain when the system comes under extreme stress. In strictly scientific terms, there is no way we can contemplate a 'spiritual' sphere that is not based on a 'material' infrastructure and that manifests itself in it.

This does *not* mean that there is no such spiritual sphere or that the spiritual is a mere *product* of the material infrastructure. That would be a reductionist view that is contradicted by emergence theory. A higher level of emergence has its own character and functions according to its own regularities that cannot be reduced to those of its components.

It would seem, therefore, that consciousness is based on brain functions. This insight is of fundamental philosophical and theological importance. There is no 'mind' or 'soul' or 'spirit' that subsists and functions without the biological infrastructure of the brain.

This fact renders the traditional metaphysics of idealism (true reality consists of immaterial ideas) obsolete. It also renders the traditional metaphysics of dualism (matter and spirit are two distinct and independent ‘substances’) obsolete. There is no immortal soul because there is no immortal body.

However, it also renders traditional materialism obsolete. Materialism is based on physical reductionism. It recognises only upward causation. Its perceptions of complexity are truncated. The only appropriate approach to the difference between spirit and body is the theory of emergence. It says that the sum total of lower level components does not explain the operation of a higher level of complexity.

The insight that personal consciousness is built on the entire impersonal infrastructure of emergence has particularly significant repercussions for anthropology (the study of human nature). On the one hand, it is not an unfortunate and redeemable accident that our personhood or ‘soul’ is located in our body, as Platonic metaphysics believed it was. ‘Soul’ emerges from bodily reality and continues to depend on bodily reality.

On the other hand, it is embedded in the impersonal supra-structure of collective consciousness with its ideological, social, economic and political facets. The supra-personal levels of emergence found in humans (and, to a certain extent, in higher animals) presuppose the personal level of emergence. A society is made up of individuals whose mental structures and processes merge into a larger dynamic.<sup>42</sup>

This forces us to rethink our traditional view of human reality. On the one hand, we must abandon the *Platonic* dualism that has guided theological thought and popular Christian assumptions over many centuries in favour of the holistic *biblical* approach, where the human being is seen as one integrated whole.

Significantly, the biblical account knows of no bodiless soul. The Hebrew word for soul (*nephesh*) means a living being, as opposed to a corpse. According to the oldest creation narrative, God breathes life into a clump of clay and that is how the human being becomes a ‘living soul’ (Gen. 2:7). When God takes away the breath of life (not the soul), the organism collapses into the earthly material of which it is composed (Gen. 3:19).

According to the New Testament, there is no immortal soul either. ‘Resurrection’ is a metaphor for the gift of a new authentic life to the entire human being, including body and soul. For Paul, ‘flesh’ means the whole human being, but in its physical and ethical isolation from God, while ‘spirit’ means the whole human being penetrated and empowered by the divine Spirit.

The real issue is, therefore, what constitutes an authentic human being. Even Platonic dualism was meant to depict the difference between essence (what we ought to be) and existence (what we really are), thus between good and evil.

On the other hand, the personal level of emergence cannot be reduced to the forces and processes at lower (biological and physical) levels of emergence, as a reductionist materialism has believed, nor is it the powerless and helpless victim of higher (social) levels of emergence, as sociologically inclined critics have often presumed, especially in the heyday of Neo-Marxism.

Both these stances deny what it means to be human. Humans are able to see themselves as biological bodies embedded in natural environments and social agents embedded in social environments. A person can impact both these environments—lower down and higher up.

<sup>42</sup> Beehives and ant heaps are sometimes called super-organisms, but they only presuppose the biological, rather than a personal, level of emergence.

### 3. Subjective experiences

When humans experience, comprehend, assess and respond to the objective world, they do so as conscious subjects. They feel the impact of an impression or message on their psyche.

You are 'overwhelmed by the beauty' of a landscape or a symphony; you are 'struck with awe' when looking at outer space through a telescope; you 'feel the pain' of a divorce or a professional failure; you are 'indignant' when confronted with a case of callousness or injustice; you are 'horrified' by atrocities such as the genocide in Auschwitz or Rwanda; you are dismayed by the bombing of Dresden and Hiroshima; you are 'stunned' by the human and ecological costs of a catastrophe such as a tsunami or an earthquake.

Such experiences are called *qualia*. A reductionist natural science tended to deem them 'purely subjective', treat them as if they were not part of 'objective' reality, deprecate them as purely emotional, and ignore them as such. In reductionist terms, they were not considered real.

That was a cardinal mistake. As we have seen, they are based on the 'hard-wiring' of the brain and caused by the neurological and hormonal functions of the system. In turn, they lead to particular brain states. They have real consequences in this world. They are real enough!

What is the ontological status of such experiences? We have seen that the internal equilibrium of the system (homeostasis) is maintained when it interacts with the outside world. Any deviation from the norm set by the prevailing brain state causes a countervailing reaction.

Abundance leads to repulsion; deficiency leads to attraction. As a result, the organism oscillates between the sensations of pleasure and pain. In both cases, the discrepancy between what ought *not* to be and what *ought* to be causes the sensation.

A number of chemicals have been discovered that are associated with subjective experiences such as sexual desire, thirst, hunger, joy, or depression. Sexual hormones and the 'fight or flight' hormones are well-known examples. Certain chemicals can produce emotional highs or lows—a fact that has dire consequences for smokers, alcoholics and drug addicts.

The mechanisms by which sense impressions, such as the smell of food, an aggressive animal, or the presence of a congenial partner, translate into the presence of the respective chemicals in the bloodstream have been explored in appreciable detail, although the field is still wide open for research.

The brain is conditioned to differentiate between what is desirable and what is repugnant. What is deemed acceptable depends on the existing synaptic pattern that underlies the current system of meaning. The earliest 'hard-wiring' is the strongest; the 'narratives' that have been reinforced most by repetitions and ritual enactments are the most stable.

That is why habits and opinions are so difficult to dislodge. They form what has been called an 'attractor state'. What fits is assimilated and what does not fit is rejected, unless it can impose itself upon the existing state and force adaptation or integration.

Depending on how existing brain states were constructed in the past, therefore, the impact of new information can lead to different kinds of reactions and subsequent adaptations. Witnessing savage cruelty, for instance, can lead to abhorrence in a subject that is conditioned by a particular culture and profound satisfaction in another. The smell of male sweat can attract or repel a female. The incessant thump of pop music can lead to exhilaration or irritation.

According to neuroscience, then, subjective experiences are based on brain states caused by the interplay between neural reactions and chemicals released into the bloodstream through sense impressions and fantasies. Such feelings are not willed or constructed; they ‘pop up’ on their own.

## Are subjective experiences a mystery?

One could argue that all this belongs to the explanation of objective processes, rather than subjective experiences. How can an objective brain state lead to a subjective experience, that is, how it actually feels when we are depressed or in love? This is often deemed a mystery, but is it really? This ‘mystery’ may never be resolved because there may be no mystery in the first place. It may be due simply to a change in perspective from object to subject.

You can explore the operation of a functioning brain from outside the brain by means of brain scans, chemical analyses, and so on. Then the brain of the researcher is not involved in the functioning of the brain researched and it cannot possibly fathom how this other brain ‘feels’. To develop empathy, your brain must refer back to your own subjective experiences of this nature.

Conversely, your experience of how you feel under certain circumstances does not give you the slightest clue of how your brain actually functions in neurological terms—just as the sensations associated with driving a car do not give us a clue of how the engine and the gearbox actually work. Consciousness is the functioning brain *experiencing itself from within* its operations.

To use an analogy, it is quite possible to observe a battle from outside the event (say as a journalist or a historian). But this experience is entirely different from finding yourself within the event (say as a combatant or one caught in the crossfire). Similarly, a fish swimming in water is hardly conscious of the water and its physical characteristics, yet it is completely engulfed by it.

It is similarly possible to observe and describe the manifestations of a religious conviction such as Islam from outside this conviction. It is also possible to try and reconstruct its internal rationale. This is what the academic discipline of phenomenology of religion does.

But you will never feel its compulsive and disciplinary power unless it has imposed its validity on your own consciousness. Conversion means that your consciousness is restructured in response to the impact of seemingly compelling new information, new challenges and new opportunities that somehow resonate in your own psychological set-up.

## 4. Emergent functions within the mind

As mentioned above, the reptile brain is the seat of instincts. Instincts are augmented by mental conditioning, which is formed through repeated environmental experiences. These can be programmed into the genetic code of a species over long periods of time in the form of ‘phylogenetic memories’. This happens, again, through the elimination of those entities that do not fit into the pattern. Together, instincts and mental conditioning form the subconscious.

At the most basic level, the reptile brain, lies the phenomenon of *plain reactivity*. When I inadvertently touch a red hot plate or a live electric wire, the jerky reaction of my arm is violent, immediate and automatic. When a criminal suddenly thrusts a pistol in my face, the 'fight or flight syndrome' kicks in.

Biologically speaking, the message gleaned from the environmental impact bypasses the reflective frontal cortex and jumps directly to the hypothalamus. It is similar to the immune system, which will attack an invading virus no matter what. It cannot think and decide; it functions mechanically.

The next step may be a subconscious kind of *responsiveness*, that is, the capacity to assess potential outcomes, but without the subject being conscious of it. Since early childhood, the sudden sight of a snake, for instance, has filled me with uncontrollable terror. Yet this force is not an inescapable determinant of my behaviour. Depending on the circumstances, my actual response can vary between freeze, fight, flight, or safe distance. Biologically, this greater flexibility may be correlated with the limbic system.

Then there is *consciousness* proper, that is, the awareness of an imagined, real, or potential environmental impact that calls for an appropriate response. Consciousness differs from the subconscious in that it can objectify, reflect, decide and act. A storm is brewing; so let me seek a safe haven while there is time to do so. A financial opportunity presents itself; so let me go for it! I receive a death threat; what now?

The limbic system cannot, of itself, distinguish between a message derived from an environmental impact, verbal communication and the product of mere fantasy. The sense of danger will pop up in each case. But the imagined, real, or impending impact can be analysed and scrutinised by the prefrontal cortex. The options available can be evaluated in terms of a particular frame of reference and the most appropriate response can be envisaged and executed. Coming to my senses, I can let the snake go as a creature that also has a right to live. So this level is the seat of comprehension, rationality and intentionality.

## Levels of consciousness

Consciousness differentiates into various forms and levels of complexity. Consciousness in general means that each conscious individual is more or less aware of the immense network of relationships in which it is embedded and which constantly impacts its world in a variety of ways and to which it constantly has to react.

*Self-consciousness* is consciousness becoming aware of its identity within its concentric environments. Paradoxically, the functioning of one's own body, including one's own brain, can form part of the observed 'environment' in this case. I can refer to 'my body' or 'my soul' or 'my heart' as if it were not a part of me.

I realise that my body has fever; that my psyche suffers under a depression; that my wife has given birth; that my firm has earned a contract; that the economy is in a recession. New impressions are integrated into the pre-existing hard-wired, yet malleable and dynamic patterns of memory within the brain. Together, these patterns form the system of meaning in the context

of which the individual operates. This consideration brings us to a new level of emergence that takes us to the topic of the next section.

What is the relation between the *subconscious* and consciousness? Psychiatrists tend to attribute neuroses to the suppression of subconscious forces either by conscious decision or cultural convention. Obviously, there is some truth in this stance. However, mastery over the suggestive power and urge of one's 'reptile brain', as well as control over the irrationalities of the limbic system, belongs to the singular capacities of the neocortex of the human being. We are not the helpless victims of lower levels of emergence. There is not only bottom-up causation but also top-down causation.

So on the one hand, consciousness operates within the context of the subconscious and is, at least to a considerable extent, constrained by it. On the other hand, consciousness can control, utilise, suppress, or supersede the subconscious, for instance, when a married man remains true to his wife although his instincts attract him to another woman.

It is at this point that the embeddedness of an individual consciousness in the impersonal supra-structures and processes of a collective consciousness—including religious, cultural and social values and norms—kicks in to guide and reinforce consciousness in its assumptions, decisions and behaviour. We shall come back to that in the next section.

## 5. Memory—information deposited in the brain

Individual and collective memory is, of course, critically important for the formation of personal assumptions and religious traditions. Biologically speaking, 'memory' has a number of layers. The phenomenon of memory is based on the synaptic networks mentioned above. When a foetus develops, the impact of its genetic make-up, on the one hand, and sense impressions derived from the environment in the womb, on the other, begins to 'hardwire' the brain into particular patterns. This process continues during infancy, adolescence and all subsequent stages of life.

In all these cases, 'knowledge' or 'memory' consists of relatively stable clusters of synaptic connections between neurons. Synapses can be switched on or off. The impact of all successive environments on the individual and its responses to these impacts are stored in particular synaptic patterns.

These patterns constitute dormant symbolic representations of the original environmental impacts, which can be activated by certain triggers. You can 'recall' something that has happened before. Brain scanning techniques can pick up the electric currents involved and locate these patterns within the geography of the brain. The formation of such relatively stable patterns is an example of 'downward causation'.

As an emergent reality, memory presupposes the neurological architecture of the brain. But the repeated impact of differentiated experiences can select certain

patterns that are most congenial to enhance the orientation of the individual within its environment. New experiences continuously amplify and adjust the resultant pattern.

Genetically transmitted information is the first and most fundamental kind of 'memory'. It includes the procurement of the prerequisites of healthy survival such as food, sexual attraction, rest, activity, shelter, protection, emergency responses, etc. As mentioned above, these 'instincts' seem to be located in the most primitive layer, the so-called 'reptile' brain. They are very powerful and cannot easily be dislodged. But they can be superseded (controlled or repressed) by patterns and processes at higher levels, such as personal goals, cultural norms, or collective visions. This is the area of ethical reflection, conscience and moral behaviour.

Secondly, there are relatively programmed responses to environmental influences. This is the area of ingrained habits, routines and skills that we perform without thinking. To change habits is not always very easy. The most original environmental impacts form the most deep-seated, enduring and 'stubborn' patterns. The brain is largely 'conditioned' during early childhood. Such structures are foundational in the sense that they provide the internal stability of the mind.

But synaptic networks are not static and immutable deposits. They can be called up and restructured when the individual is impacted by a different set of environmental messages and challenges. Pain, suffering and frustration caused by a bad habit are probably the most effective ways of getting rid of them, because they disturb the homeostatic condition of the brain.

The brain will clean out the place and find a new consistent pattern. It can reject unpalatable impulses, modify elements that cannot be avoided, or replace obsolete patterns. The pattern will then sink back into the subconscious in this new form.

Memory itself is, therefore, in constant flux. The oldest memories are the most stable and persistent. More recent and superficial impressions are stored in short-term memory. In a secondary process, they are relocated into long-term memory. But they can also get lost, pushed aside, or changed, especially when we get older.

## **6. Information and communication**

A brain state, that means the total constellation of synaptic patterns in the brain, contains symbolic representations of all of reality experienced so far. It is relatively stable, yet not static. Memories do change in time. After some decades, they may deviate substantially from written documentation of the same events made at the time when they happened. Memories of the same events also differ between different people.

The human mind is capable of communicating such brain states by means of secondary, highly differentiated and abstract systems of symbols, the most sophisticated of which is language. It is supplemented by gestures, facial expressions and 'body language'. There are rudimentary parallels in higher animals, but human communication is without parallel.

Verbal communication is a very sophisticated example of the transfer of information. As mentioned in the last chapter, the entire hierarchy of emergences is determined by information of various kinds at various levels of emergence.

At the biochemical level, for instance, information is carried by the structure of certain molecules. Systems of molecules develop autocatalytic functions. They can settle into distinct

patterns. They can replicate themselves. They can impact the patterns of other systems. Such patterns are primitive symbols that communicate information between discrete entities.

At higher levels of emergence, the complexity of symbol formation increases exponentially. Complex systems of information with multiple feedback loops can lead to the self-organisation of an entity at a higher level of emergence, for instance, an organism. The functioning brain is the most sophisticated example.

As we have seen, the ‘hard-wiring’ or ‘conditioning’ of the brain comes about through genetic pre-adaptations, on the one hand, and networks of synapses established by environmental impacts and responses to these impacts, on the other.

These impacts are largely based on patterns of information. The scent of honey, for instance, directs the flight of a bee towards a flower. What makes the human being human is the exceptionally advanced degree of symbolic representation and communication. Symbols found in language, facial expressions, computer codes and countless other phenomena act as messengers that transfer meaning from person to person.

What happens here is that a construct, represented by a set of symbols in one consciousness, is reconstructed in the consciousness of another consciousness. The transfer of meaning through symbolic representations is continuous, dynamic, situation-specific and interest-related.

Systems of meaning are stored in the brain. Symbols can carry a number of meanings and associations that may differ between the sender and the receiver of a message. The meaning of a symbol depends on the total context of meaning within which it is located in the case of the sender, on the one hand, and of the receiver, on the other.

The transferred meaning will adapt to the new context when it moves from the sender’s hard-wiring to the receiver’s hard-wiring. There is continuity as well as novelty and evolution within the communicative process. Continuity is brought about by the similarity between the systems of meaning of senders and recipients, novelty by their discrepancies, and evolution by the process of the mind sorting out these discrepancies.

Language is an inestimable benefit not only in terms of communication, but also in terms of the development of higher intelligence. Human comprehension is aware of sequences in time (thus history) and regularities in space (thus abstract thought). It is able to envision a reality larger than its immediate environment (a world). It intuits overarching contexts and transcendent foundations and combines them into systems of meaning.

It tries to define its individual and collective identity within its concentric contexts—the body, the community, the society and nature. It discerns options with potentially beneficial and detrimental consequences. It formulates goals, values, norms and visions. It is aware of the fact that it is derived, embedded, dependent, vulnerable and mortal. It is aware that it is subject to authority, accountable, under scrutiny, guilty and dependent on reconciliation.

It is self-evident that these insights are of cardinal importance for an understanding of how the ‘Word of God’ is communicated from one person to another and why the message intended by the sender is not always identical with the message heard by the receiver. Sensitive preachers and speakers become aware of the fact that what they say reaches their audiences only partially. Moreover, it can be, and usually is, misunderstood to some extent.

## 7. The emergence of collective consciousness

So far, we could gain the impression that structures of consciousness are located only within the individual brain. This is demonstrably not the case. On the one hand, the very development of concept formation and language in general always occurs in a social context and through an interactive dynamic.

On the other hand, there can be novelty in individual thought that may impact the social environment very profoundly. Science, technology, creative art and literature, even the most elementary exchanges of opinion provide ample examples.

The link between individual and collective consciousness is the transfer of information through symbolic representations, rather than direct contact with an objective entity out there. An apparently absent object is represented, thus made 'present', through its symbol.

If I shout 'Fire!' there will be a reaction in my social environment, even if there were no fire. This is important in theological terms. If I attribute a narrow escape to the redemptive intervention of God, it will have some effect on my listeners—whether affirmative, agnostic, or dismissive.

In this way, snippets of meaning, logical sequences and more comprehensive systems of meaning can be transferred from person to person, community to community, generation to generation. There is a constant flow of information throughout a community or society.

In time, the interaction between all these inputs may crystallise out to form the dynamic conglomerations of meaning that constitutes a particular culture, a collective mentality, or a religious set of assumptions. Such systems of meaning develop their own dynamic in the form of traditions. This is also true for Jewish, Christian and Muslim traditions of various kinds.

In a relatively free and open society, packages of meaning that are able to respond best to the pressing needs and desires of the greatest number of people within a given population will have the greatest impact on the provisional system of meaning of the community as a whole.

In Darwinian terms, the fitness of a package of meaning in relation to the need structure of the environment determines its chances of survival and further development. In economic terms, the product that responds best to market demand will constitute the most successful supply.

In this sense, the evolutionary principle of the survival of greater fitness in particular environmental niches is applicable. However, there are also many instances where an entrenched authority and institutionalised social structures can inhibit or suppress the free flow of information and the constant reformulation of the tradition.

Collective consciousness is constituted by the sum total of individual consciousnesses, yet the interaction between these components leads to a new level of emergence with its own characteristics and dynamics. In this sense, collective consciousness represents a supra-personal level of emergence that co-determines the personal level very profoundly.

As elsewhere in the hierarchy of emergences, there is bottom-up and downward causation. Individual consciousness has an impact on community and society; community and society have an impact on individual consciousness.

In relatively homogeneous groups and societies, collective consciousness is relatively compact and stable. In a more pluralistic situation, masses of (frequently quite contradictory) pockets of meaning continuously flow from person to person, from community to community, all ending up in the melting pot of communal and societal mindsets.

The individual mind will try to shut out unwanted information, affirm existing patterns, or critically integrate what seems to make sense. If there is an oversupply of alternative and partial packages of meaning, ‘turbulence’ may be the result. It can take the form of fragmentation, cognitive dissonance, cultural uprootedness, anomie and disorientation. Some of these phenomena can easily be observed today in popular ‘postmodern’ cultures.

Does the analysis of the human being offered above imply a materialistic approach that denies the spiritual dimension of human existence?

## Section III

### The ‘real’ human as a spiritual being

The last section went beyond the threshold that seems to exist between bodily functions and the ‘spiritual’ sphere of human existence. This is hardly surprising, because the brain as a biological organ forms the infrastructure of human consciousness.

But what about the *way* our consciousness is structured and oriented? What about the concrete *shape* of this structure? Or to put it in traditional terms, what about different *kinds* of ‘spirit’? Can they all claim the same level of quality and validity? We have here reached a level of emergence that builds on the existence of consciousness, yet gives the latter a definitive shape, which can be observed, analysed and scrutinised.

This is where the issue of the ‘true human being’ is located. We shall come to that in the next section. For now, we try to understand how systems of meaning emerge. We can feel, observe, explain, predict, evaluate, decide and act. Not to get lost in the maze of memories and impressions, we need some kind of stable foundation in life: a system of meaning, a set of criteria of what is to be deemed acceptable and allocations of authority in the form of statuses and roles.

#### 1. The system of meaning

Our personal system of meaning has emerged and evolved in our life histories from conception onwards. Through the processes of socialisation and the internalisation of ongoing messages, our ways of making sense of the world are

determined to a very large extent by our social environment. As mentioned above, entrenched authorities and institutional structures can exert enough pressure to make people conform. Therefore you find whole societies composed almost exclusively of Muslims, Hindus, or, not so long ago, Catholics and Protestants.

Being part of human nature, all this still belongs to the ‘real human being’. In philosophy and theology, structured and oriented consciousness has traditionally been called ‘spirit’. We can speak of the spirit of an individual, a community, a society, a social event, a constitution, a corporate ethos.

In all these cases, we are referring to a particular system of meaning and its corollaries. To see why such a system of meaning is indispensable for human life, we have to go back a few steps and analyse what happens in our daily decision-making processes.

## Switches

Individual consciousness is embedded in collective consciousness. Social processes can impact personal decisions that can again impact biological functions, chemical reactions, physical and subatomic processes—and vice versa. There is both upward and downward causation. Intentionality thus operates within the constraints imposed by both infra-personal and supra-personal levels of emergence.

However, within these parameters, the human being is confronted with a range of options, thus with the gift of (constrained) freedom and the demand of (limited) accountability. The greater the realm of options, the greater the realm of freedom, and by implication, the realm of accountability!

Every decision is a ‘switch’ that leads the world process into a particular direction. This is a metaphor taken from the railways. Tiny variations at the beginning of a process can lead to vastly different outcomes. A switch thrown in Johannesburg can direct a train either to Durban or to Cape Town. A ridiculously insignificant switch in the life of my mother has led me—quite against her intentions—to become a South African theologian, rather than a Namibian farmer as previously envisaged.

Chaos theory speaks of ‘sensitivity to initial conditions’, or the ‘butterfly effect’. The flap of a butterfly in Australia can cause a tornado in the Gulf of Mexico.<sup>43</sup> A crow scratching loose a bit of snow in the Swiss Alps can trigger an avalanche that can bury several villages lower down. A tiny change of direction at the beginning of a process can lead to massive consequences as it unfolds.

We are here interested in the change of conditions at the very outset of such processes. Within the parameters set by the past, the future is open. The future is a kind of ‘field’ of unrealised potentials. Whatever becomes real is surrounded by a fairly wide field of what could have become real. Depending on the balance of lower

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<sup>43</sup> Suggested reading: R. J. Russel, N. Murphy, and A. R. Peacocke (eds), *Chaos and Complexity: Scientific Perspectives on Divine Action*. Vatican: Vatican Observatory Publications/Berkeley, CA.: Center for Theology and the Natural Sciences, 1995, pp. 35-48.

level forces that bear upon a situation, there is always the ‘adjacent possible’ and the more ‘remote possible’ before you come to the ‘impossible’.

The adjacent possible can become real with a relatively small shift within the constellation of powers that impact a situation; the more remote possible needs greater shifts in the balance of power to become real. As mentioned above, I cannot walk through a wall, but I can enlist the power of a bulldozer to create a passage for me through the wall.

The higher the level of complexity, the greater the range of what is possible. The probability that one of these possibilities will be realised is staggered according to the number and power of the forces that impact on the situation. Left to its own devices, the world process will follow the path of least resistance. Expressed in Darwinian terms, options with greater ‘fitness’ within environmental niches will survive.

Yet, intentionality can influence these processes to move in desired directions. Intentionality and agency are geared towards desired outcomes; they have an ‘arrow’, a direction. Left to its own devices, water will flow downhill. But human intentionality can bring countervailing forces to bear that make water flow upwards. Intentionality is guided by perceptions of what ought to become. This is where values, norms, goals and visions have their place.<sup>44</sup>

I find it helpful to distinguish between factuality, potentiality and actuality as expressions of past, future and present. *Factuality* has to do with the situation that the past has created. It is the situation in which we find ourselves at any given point in time. Because it is the outcome of past developments, it cannot be changed. We cannot access the past; in fact, it no longer exists. So there is nothing we can do about factuality. Disconcertingly, it also lays down the parameters within which any possible future can occur.

Depending on circumstances, these parameters open up a limited but substantial range of possible futures. I call this openness of the future *potentiality*. I cannot be in Amsterdam or Tokyo at the same time. I can also not live tomorrow or yesterday. But departing from here and using up time, I can move in all kinds of directions. Yet this freedom is subject to certain parameters. I cannot move vertically up to the sun or down to the centre of the earth. I also need time for such movements. I also need energy to reach a desired destination.

*Actuality* is the point at which one of the potential futures opened up by the past is realised, turns into present reality, and subsequently into a fixed part of the past, which then again determines a new range of possible futures. Such a decision leaves behind the whole range of potentials that have not been realised and that will never be realised because they have also become a part of the past.

## Where switches occur

Humans become aware of options as reality moves into the future. They anticipate their possible consequences and try to let beneficial options materialise. Every single moment is the starting point of a process that moves into the future. Some of these starting points are heavily predetermined by the past. Others are more open. It is at these points that a spectrum of options presents itself.

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<sup>44</sup> Suggested reading: Stuart Kauffman, *Reinventing the Sacred: A New View of Science, Reason, and Religion*. New York: Basic Books, 2008, pp. 72-87.

The greater the balance of forces impacting the situation, the greater the sensitivity to initial conditions, the easier it is to change the direction of the process. Realising an option by applying a certain amount of pressure, I can 'switch' the direction of the process. Chaos theory has taught us that there are situations that are so finely balanced that the slightest impulse can move the ensuing process into a variety of directions.

Take the proverbial needle that stands precisely balanced on its sharp end. In the absence of any outside influence, it will continue to do so forever. This does not happen because the probability of such a total absence of influences is virtually zero. The slightest impact on the needle will send it falling in the direction opposite to the impact.

The closer a situation is to such a balance, the smaller the impulse needed to change the direction of the ensuing process. Conversely, the more stable and static a situation, the greater an impulse must be to make a difference. I cannot uproot a mature oak tree with my bare hands, but I can do so with appropriate machinery. In highly balanced situations, a minuscule impact is needed to make a significant difference.

Quantum physics says that our mere observation, thus nothing but a flow of information between us and the object we observe, determines the attributes of a quantum. The biological mathematician Stuart Kauffman believes that life itself can only exist at the 'edge' between chaos and stability.<sup>45</sup>

In neurology, the mere imagination of an impending threat can cause the 'flight or fight' hormones to flush through my body and cause an action that changes the course of events. The mere thought of an ice cream can make my mouth water.

In psychology, a vision can determine our motivation, intentionality and agency. In cultural anthropology, the characteristics of a culture one observes depends on the mere questions with which one approaches that culture, which in turn may impact the evolution of that culture very profoundly.

So the balance of power between the impulse of my action, other factors that impact the situation, and the internal resistance of the process to change appears to be decisive. At points of extreme sensitivity, an ardent wish or a fervent prayer in a seemingly hopeless situation may open up my consciousness to options previously hidden to me and trigger the impetus for developments to move in certain directions. Conversely, a spirited initiative, backed up by personal energy and the necessary social and physical support, can push even less sensitive and more resistant situations in the intended directions.

These deliberations throw light on the much-debated issue of human freedom.<sup>46</sup> A reductionist approach to physics felt constrained to deny human freedom altogether. Every decision and action was believed to be determined by causality operating at the physical or material level. Emergence theory has shown that this assumption was flawed. There is both upward and downward causation.

<sup>45</sup> Stuart Kauffman, *At Home in the Universe: The Search for the Laws of Self-organization and Complexity*. New York: Oxford University Press, 1995, 26ff, pp. 86-92, 257-64.

<sup>46</sup> Suggested reading: Ph. Hefner, *The Human Factor: Evolution, Culture, and Religion*. Minneapolis: Fortress Press, 1993, pp. 97-122.

Freedom of the will is not an illusion, therefore, but it is a constrained kind of freedom. The constraints are staggered according to the relative power relations between determining factors. The closer I get to a finely balanced situation and the greater the power I can apply, the greater my freedom and the more consequential my decision and action. I cannot prevent a great river from flowing downhill with my bare hands, but a company with the means to build a dam can succeed in doing so.

## 2. Why systems of meaning are essential

Now we are ready to see why, for humans, specific systems of meaning are indispensable. Every decision represents a shift in the direction of the cosmic process that has unending consequences—beneficial or detrimental. Because the consequences of even minor decisions can be substantial, human cultures insist that there should be no exercise of freedom without taking responsibility for the consequences of one's attitudes and actions.

But our decisions are usually self-interested, spontaneous and irrational. As Paul spelt out in Romans 7, even where we have good intentions, our desires tend to prevail. Moreover, assuming that the will to act responsibly is powerful enough to assert itself, the consequences of our decisions cannot always be foreseen, not even in the short term and within the range of the interests of a particular group, let alone in the long term and for humanity and the natural world as a whole.

On its own, therefore, individual human consciousness and conscience would be vastly overtaxed by the burden of responsibility. However, decisions and patterns of behaviour are far too serious to leave to whims and desires. We need particular directives that (we hope) will lead processes in acceptable directions.

It is not self-evident what is to be deemed acceptable. Ethical imperatives are, whether explicitly or implicitly, embedded in a wider set of assumptions that constitutes an overarching system of meaning. A system of meaning represents the collective experiences of countless generations and their (sometimes quite inappropriate) interpretations. Such 'symbolic universes' define individual and collective identity, lay down criteria of what is deemed acceptable, grant or deny acceptance on the basis of these criteria, and allocate authority in the form of statuses and roles.

Human beings are capable of intuiting a system of meaning because they are able to transcend their immediate experience to a much greater degree than higher animals. They go beyond their personal recollections into the more distant past, their personal hopes and apprehensions into the more distant future, their immediate environments into their concentric contexts—body, community, society, nature, or cosmos—and their immediately available personal resources towards greater powers. In short, humans always envisage some kind of greater whole in terms of time, space and power and try to fathom its structures and regularities.

### 3. The stability of a system of meaning

Symbolic universes acquire considerable synaptic stability, which translates into 'validity' or 'sacredness'. They hold the acting subject accountable. They are not necessarily based on scientific evidence. In fact, they normally contain a great number of unsubstantiated and often quite spurious assumptions. They often reflect the interests of powerful elites. That is why they should be required to integrate the insights of 'best science'.

A system of meaning defines our identity, authenticity and authority within the greater whole. This is the existential root of a system of meaning. Where such a system is artificially constructed, it tends to survive only as long as it can be imposed by entrenched authorities and stable institutions.

More enduring traditions emerge and evolve over long sweeps of history. They incorporate successive and diversified collective experiences and are constantly being corrected by history itself. Personal or communal experiences and reflections again augment, correct and transform inherited and previously held patterns. Where this is not the case, a system of meaning morphs into a totalitarian ideology.

A system of meaning is, therefore, the crystallisation of outcomes of 'trial and error' in response to concrete experiences over long periods of time, accumulated by successive generations, but processed by the individual brain. Assumptions and patterns of behaviour either worked or they didn't. They have been hard-wired into the collective convictions and consciences of communities. They are informed as much by experiences as by intuitions. They can hail all the way from prehistoric times right down to learning curves that individuals and communities undergo in their daily lives.

A system of meaning thus integrates the experiences and intuitions of past generations with the apparent requirements of newly experienced situations. This is one of the roots of religious intuitions, myths and rituals. Initially, such a system may be diverse and multi-focal, but there is a tendency to integrate subsystems under a pivotal centre or build them into an integrated whole. Such a consolidated system of meaning constitutes, therefore, a new level of emergence.

Appropriate religious faith represents the widest attainable horizons in a particular cultural context. Ideally, it will be bundled and organised by a notion of the transcendent Source and Destiny of reality as a whole. Believers look at reality 'from above', as it were, 'with the eyes of God', discerning their own limited locations, statuses and roles within their concentric contexts. This is one of the roots of monotheism.

Religious conviction, therefore, does not have to be ecstatic, irrational, or superstitious. It can be down to earth, sober and factual. In its most mature form, it could be expected to be geared towards the vision of comprehensive optimal well-being, simply because it covers the whole of reality experienced so far. Unfortunately that is not a very common phenomenon. We will come to the reasons below.

#### 4. The ‘reality-component’ of a system of meaning

As the term ‘system of meaning’ implies, structured and oriented consciousness defines *overall meaning*, the rationale of the whole, and the purpose of phenomena within the whole. It consists of basic assumptions ‘hard-wired’ in a synaptic network. It defines *acceptability* in the form of values, norms, goals and visions. Its criteria emanated from the network that will filter out new information that does not seem to fit.

It circumscribes particular *identities* within the greater whole; it grants *belonging* to those deemed acceptable and disciplines or excludes the unacceptable. It allocates *authority* to act in a certain way through mandates, statuses and roles. It forms what colloquial language calls ‘conscience’, what psychologists call a ‘super-ego’, and what sociologists call a ‘sacred canopy’, or a ‘civil religion’.

Ideally, a fully fledged system of meaning will cover all inherited traditions, collective memories and personal experiences made so far during one’s lifetime. The brain integrates the impact of new impressions into the patterns established by previous experiences, thus constantly reorganising the mind.

We see now why genuine systems of meaning cannot be wilfully constructed. They impose themselves on our consciousness. It is only when existing and new patterns ‘fall into place’ that the entire system seems to ‘make sense’. Often, a ‘solution’ is found by the subconscious overnight or over longer periods of time, when the disparate elements finally begin to dovetail.

A religious assumption can seem to be ‘real’, although it cannot be borne out by empirical evidence. This is due to the fact that on its own, the mechanism in the brain cannot technically distinguish between information based on fallacy, fantasy, fiction, or hearsay, on the one hand, and empirical fact or historical evidence, on the other. It can only screen the content of new information on the basis of existing patterns, and either reject it or adapt and integrate both old and new.

This is of great importance for theology, because, paradoxically, it provides the reality component of a notion of the transcendent and its system of meaning. The pattern located in our brains is objectively real as such, while the intended ‘object’ it symbolises may not.

This again opens up the possibility of highly inappropriate and ‘otherworldly’ assumptions and convictions. People can live subjectively in a world populated by angels, demons, saints, witches, or ancestral spirits and experience them as real, communicate with them, battle with them, exorcise them, or be oppressed by them. This is obviously also true for our concepts of God.

But just as one scientific theory can be replaced by another on the basis of new empirical evidence or a new mathematical procedure, such systems of meaning can be analysed, critiqued, transformed, reconstituted, or abandoned through the communication of new content that seems to make more sense or the impact of new environmental experiences. Again, this is also true for our concept of God.

## 5. Screening new information

Because the brain is geared to homeostasis, not every new information or impression will be accepted as valid. Systems of meaning tend to be rigid, because they are based on entrenched 'attractor states' of the brain. There are criteria, built into the system of meaning itself, that filter new impressions.

Where the latter are integrated in the existing pattern, new criteria are 'hard-wired' in the brain as modifications of the system of meaning, otherwise they would not take effect. They are not add-ons, but become part of the very structure of the system of meaning concerned.

This structure is robust enough to resist changes that are not in line with its past development. It is not easy to change course in life. Ingrained assumptions, values, norms and habits tend to be stubborn. Yet our brain is continuously bombarded with new information. This may be in line or at variance with what was previously 'taken for granted'.

There is, therefore, a constant tug of war between old certainties and new challenges. This 'inertia' of the brain assures emotional stability and cognitive coherence. Yet systems of meaning do have the capacity to change. They are fairly tenacious but not fixed. Both 'memory' and the shape of new impressions on the mind are malleable.

So 'making sense' is an onerous chore that makes incessant demands. However, an integrated structure is being sought at all times. It is this kind of consistency or coherence that constitutes the subjective experience of 'truth'. If the deviation is large and persuasive, or even fundamental, a state of 'cognitive dissonance' and 'anomie' may occur.

Such a state of mind is unpleasant for the mind itself. The brain is flooded with antagonistic chemicals that cause a kind of physical discomfort. The brain will try to sort itself out either by changing the old to accommodate the new (learning), by transforming the new to fit into the old (rationalisation), by rejecting the new outright (conservatism), or by abandoning the old in favour of the new (conversion).

It goes without saying that these insights challenge us to reflect more deeply about what actually happens when Evangelists call people to repentance, when somebody is converted to the Christian faith, when Christians feel the need to expose themselves regularly to the Word of God and the fellowship of believers, when formerly converted people are 'backsliding', or when believers become fundamentalist, rigid and even fanatic in their religious commitments.

What does all this mean in terms of the tenacity (or flexibility) of synaptic networks located in the brain? Does the message of the Gospel create an entirely new synaptic structure, or does it merely call up, modify and reinforce those that had been laid down in early childhood? Missionaries tend to link up their message with certainties already existing among their converts. But will the original structure be bent to the new message or the new message to the original structure?

How do we deal with the clash between a seemingly dominant new system of meaning and an existing one displaced and hidden in the subconscious? When confronted with crises, for instance, converts hailing from traditionalist societies tend to fall back on previous assumptions such as appeasing the anger of neglected ancestors, or counteracting the power of sorcery, rather than appealing to Christ as their Saviour.

How do we resolve the ‘cognitive dissonance’ between a modern world view informed by science and biblical world views deemed the eternal, inspired and inerrant Word of God by naïve or fundamentalist believers? And if there is no integration between modern insights and Christian convictions, which one will prevail in the long run?

Can syncretism be avoided when people have been exposed to contradictory experiences and messages, all of which seem to merit attention? Think of the ‘theological’ differences among Christians who were exposed to Platonic, Buddhist, African traditionalist, nationalist, Marxist, or liberal-capitalist assumptions! How can unity between such believers be attained?

## 6. The ethical dimension

Reality is in the process of becoming. When taking conscious or unconscious decisions, humans impact the direction of the world process as a whole forever after. Minute changes in direction can lead to exponentially deviating and accelerating processes. Their consequences can be detrimental or beneficial. In fact, they can be horrific.

By 1914 immense tensions had built up between major powers in Europe. The decision of the German Emperor to respond to the murder in Sarajevo with military rather than diplomatic means led to World War I, the defeat and humiliation of Germany, the rise of Hitler, World War II, the destruction of Germany, the eclipse of European imperial powers, the rise of the United States and the Soviet Union, the cold war and so on. A single decision triggered massive and escalating developments.

That is why humans have always been aware of the distinction between ‘good’ and ‘evil’, although they filled these two concepts with widely divergent content. A science that does not take the character of these historical developments into account is a deficient science. In fact, the pursuit of science itself depends on human history with its endless sequences of reality-transforming switches.

We should not be surprised, therefore, that biologists have tried to explain ethical consciousness as an outcome of evolutionary processes. Usually, they employ the Darwinian principle that what enhances the chances of survival of the species will survive as a system of values and norms.

While there is truth in this contention, it is not the whole truth. The human being has reached a level of emergence that is capable of transcending its survival instincts and emotions towards greater causes.<sup>47</sup> Humans can focus their intentionality and agency upon a more comprehensive whole, whether to abuse, exploit and destroy it, or to contribute to its overall well-being.

Being aware of wider contexts that impact life in general and the life of the species in particular, responsible human beings can be expected to develop a vision

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<sup>47</sup> Richard Dawkins believes that evolutionary mechanisms ‘sometimes misfire’ and the persistence of compassion and generosity in humanity over millennia is due to a ‘blessed, precious mistake’, thus a derailment of the evolutionary process (*The God Delusion*, 2005, 220f). But this only shows that Dawkins is a reductionist who does not take higher levels of emergence into account. For a critique see my book ‘Richard Dawkins’ *God Delusion: A repentant refutation*. London: Xlibris, 2010, 129-136.

of comprehensive optimal well-being. They can then also be expected to tackle any deficiency in well-being in any dimension of life as far as their competence and influence goes.

This expectation would be entirely in line with the evolution of life, because there is no life that does not possess an inherent thrust towards survival and well-being, which again depends on the health of its environment. Countless synergies in nature as well as the sparing attitude of many carnivores show that the evolution of such behaviour is entirely 'natural' in terms of the evolutionary process.

The problem is that the long pre-historical development of humankind left it insufficiently conditioned to strive for the well-being of their social and natural contexts. Humans have few biological defences, such as powerful jaws, sharp horns, or fast legs. Their vulnerability to predators, diseases and violence necessitated a powerful emphasis on survival, procreation and mastery.

For this reason, humans may be instinctually more selfish and insatiable than other animals. The hard-wiring of the reptile brain for survival and the limbic system for prosperity and pleasure tends to override the human capacity to think and act rationally, a capacity that is situated in the neocortex. That would perhaps be a scientific rendering of 'original sin'. With the rise of technology, their greater powers amplify the consequences of such selfishness far beyond that of higher animals.

## Modernity increases the stakes

The exponential acceleration of the processes set in motion by modernity has produced a network of interaction patterns that has global dimensions. More than ever before, the powers unlocked by modernity overshoot the human capacity to control the consequences. Our minds are flooded by colossal information streams that include the most serious and the most trivial, the most informative and the most misleading.

This would call for a highly alert and critical mindset, if not immediate and decisive action. Potential solutions are not something mysterious or unattainable, at least not in principle. Humans are part of a comprehensive network of relationships and they are capable of being conscious of this fact.

The experience of what reality ought *not* to have become is pervasive and inescapable. Weapons of mass destruction, overflowing refugee camps, devastating droughts and famines, terrorist attacks, the epidemic of domestic violence and rape, oil spills, drug cartels, ruthless demagogues and dictatorships—such topics are daily on our television screens.

On the basis of an appropriate system of meaning, these experiences should evoke concern, indignation and a dynamic vision of what reality as a whole *ought* to become, at least on Planet Earth, as well as a powerful thrust of human intentionality and agency in the direction of this vision. It is the distorted value system of modernity that prevents this from happening.

What ought to become cannot simply be derived from immediate human needs, wants, whims and desires, whether individual or collective. And this is where the problem is located. The modern mindset evokes, legitimates and insists on the pursuit of individual and collective self-interest at the expense of others and the environment.

Inherited religious and cultural traditions are not necessarily designed to cover global horizons and deal with such a huge qualitative spectrum. Those that would have the potential to do so, including the Christian faith, humanism and naturalism, are largely ignored. The injunction ‘Don’t do it!’ has changed into ‘Just do it!’ The obsolescence of such traditions leads to a dearth of appropriate criteria, goals and visions. We are today in a state of spiritual entropy. Nothing seems valid, certain and binding any more.

It is imperative that science and faith cooperate to create the awareness and the motivation needed to re-establish a sense of validity, acceptability and urgency at this juncture in human history. Science is capable of opening up the horizons to cover ever greater dimensions; faith must insist on human attitudes and actions consistent with the vision of comprehensive optimal well-being and motivated to deal with any deficiency in well-being that is within the reach of relevant individuals and communities.

If we all have the same kind of consciousness based on the same kind of brains, does this mean that all worldviews and convictions are basically equal in nature, content and validity?

## Section IV

### The ‘true’ human being—sharing God’s intentionality

#### What kind of spirit?

So far, we sketched the ‘real’ human being as it may appear in the eyes of a scientist whose world view is wide enough to include all dimensions of human experience. We dealt with the human being as a biological animal, analysed the way consciousness functions and saw why human existence is geared to a system of meaning.

These analyses brought us to what used to be considered the ‘spiritual’ level of life, that is, the level of structured and oriented consciousness. However, ‘spirit’ is a blanket term that covers all kinds of convictions and commitments with widely differing contents and consequences. It is time we become more specific.

Freedom implies responsibility. Attitudes, intentions and actions have beneficial or detrimental consequences. The question we are faced with is, therefore, what kind of human being can be considered the ‘true’ or *authentic* human being in contrast with a false, misguided, or *inauthentic* human being. This is a question about the *quality* of the structure and orientation of consciousness.

What matters for philosophy and theology is not the apparatus of the mind as such, therefore, but the appropriateness of the specific content of ‘spirit’. We shall

approach this question from the perspective of the biblical faith, yet informed by the insights of modern science.

## 1. Postmodern relativity

Before we come to that, we have to place our deliberations in the context of the current mood of popular postmodernity. Does the specific *structure* and *orientation* of consciousness (the 'spirit') really matter? In scientific terms, it does not. One can argue that all mindsets and convictions have an equal right to exist, because they are all human, and humans all have the same dignity, because they belong to the same species. So why bother about 'truth' or commitment!

Well, they do indeed exist and cannot simply be wished away. We cannot argue with the same force of plausibility, however, that they all have the same quality, profundity and validity, just as we cannot argue that amoebas, lizards and apes have reached the same level of complexity, flexibility and performance. 'Spirit' can turn out to be counterproductive in terms of the vision of comprehensive optimal well-being, even in terms of the very prerequisites of biological life.

Because we yearn for harmony and tolerance, this fact is often overlooked in postmodern interfaith relationships. The valid assumption that human beings are of equal dignity is often translated into the spurious assumption that all the kinds of spiritual structure these people may have internalised are of equal quality and validity. Moreover, spirit can display pathological characteristics. It can also degenerate and decay. There is something like spiritual entropy.

Hitler's racist and violent convictions, for instance, cannot claim to be on par with the peaceful spirit represented by Gandhi or the self-effacing love of Mother Theresa. And these differences proved to have massive consequences. There are criteria, and these criteria are located in particular systems of meaning. Ideally, they should be geared towards the vision of comprehensive optimal well-being, but that is not necessarily the case.

Alternatively, idealists often assume that all humans are basically endowed with a spirit of loving concern and that all convictions represent this spirit in one form or another. That is blatantly not the case. Elitist arrogance, entitlement, brutality and destructiveness, especially during times of violent conflict, are integral parts of many cultures. The typically 'humanist' spirit is a particular tradition among others that cannot be taken for granted.

The biblical faith, for one, is highly sensitive to the ambivalent and problematic character of the human spirit. In fact, the urge to overcome a counterproductive spirit is a potent driving force in the biblical faith. This is not simply a case of fundamentalist intolerance. It stems from the realisation that human mentality patterns can be hugely counterproductive in terms of human well-being. This is true even though the biblical faith faced an uphill battle to implant social justice and loving concern in the collective psyche of its believers.

Ancient Israelite prophets and the Book of Deuteronomy warned the Israelites to shun Canaanite gods. The text presupposes a particular definition of God, namely the God of a covenant between Yahweh and Israel based on moral integrity and social justice. Christians are warned not to follow the next best kind of spirit, but to test each one of them, whether they are

‘of God’ (1 John 4:1). Again, the text presupposes a particular definition of what is ‘of God’, namely sacrificial and redeeming ‘love’ as manifest in Christ (1 John 4).

The Christian assumption is that there is an authentic kind of spirit to which humans should aspire, or rather, in which they are invited to participate. This is the ‘divine’ spirit of social justice, moral righteousness and redeeming love. It was manifest in Jesus Christ and it is meant to manifest itself again in the renewed human spirit of his followers. Since love is a dynamic process, this stance does not contradict the observation that convictions are always contextually specific and in historical flux.

## **2. An appropriate system of meaning**

While the pursuit of survival and well-being may be fundamental to all living creatures, human consciousness can develop more inclusive horizons. Then the well-being of the individual is seen in its concentric contexts—the community, society, nature and the earth. It can also contract to such an extent that it encompasses nothing but the interests of a community, a political party, a race, class or nation, and ultimately, the petty needs and desires of the individual. This ‘narcissistic’ atrophy has become the overriding tendency in modernity.

It goes without saying that only the former can be considered appropriate in terms of human dignity. An appropriate system of meaning should also encompass different dimensions of well-being, such as material, biological, psychological, spiritual, communal and cultural needs.

In experiential terms, ‘God’ is a name for the pivotal centre of a system of meaning that covers the whole of reality as it ought to be and as far as it is reflected in human consciousness. At least potentially, therefore, a vivid God-consciousness is capable of providing the most inclusive horizons available to humans in any cultural situation.

For this potential to be realised, however, the formal potential must be filled with an appropriate content. More often than not, the concept of God has been abused to legitimate the pursuit of individual and collective self-interest at the expense of the interests of others, the community, society and nature. So the quality of a particular God-consciousness must be subjected to critique and reconstruction.

## **3. Human self-aggrandisement**

Our focus lies on the Christian faith. However, we will not dive head-first into the biblical Scriptures. Doing so, we would be tempted to impose the answers of antiquity upon the questions of modernity. We rather begin with the kind of humility before God that is commensurate with the actual significance of the human species in cosmic perspectives, as revealed by the sciences.

This is entirely legitimate in terms of the biblical faith. As the biblical traditions responded to ever new predicaments, challenges and interpretations, their horizons widened. Today, our horizons are widening exponentially through the insights of the sciences. We can discern the probable distant past, the distant potential future and the infinite complexity of the evolving universe.

In comparison with our biblical and medieval forefathers, our responsibility has risen by several orders of magnitude. We must not allow the narrow horizons of our spiritual forefathers to constrain our vision. The contrast between traditional concepts and current needs has become so vast that one can argue that we have reached a new level of emergence within the realm of the spirit.

Up till recently, it was assumed in virtually all cultures and religions across the globe that our earth was the centre of the universe; that humankind was the crown of creation; that one's communal, ethnic, or racial in-group was superior to all other groups; that men were superior to women and children; that there was a hierarchy of dignity, authority and privilege, where some people are more important than others.

Correspondingly, God was perceived in terms commensurate with this tiny, trivial and truncated universe. Humans always mould their notions of the transcendent in terms of how they perceive immanent reality. Since the Enlightenment, individual piety tended to perceive God as a personal companion in the way children derive comfort from their teddy bears. Science can help faith to regain the dread and respect that we find in the biblical Scriptures and that both Christianity and modernity have lost.

Voices coming from Africa tell us that 'your God is too small a God'! Indeed, our God has become altogether too quaint to do justice to what the concept of God always meant to indicate—the transcendent Source and Destiny of reality as such and as a whole in its unfathomable vastness and complexity. Against the background of modern scientific insight, the anthropocentricity of traditional faith assumptions looks positively ridiculous.

In terms of space, the earth is less than a speck of dust in the total cosmic context, or as Brian Swimme has put it, 'one planet moving around one star, which itself is one of the three hundred billion stars of the Milky Way Galaxy, which in turn is one of a trillion galaxies in the universe.'<sup>48</sup>

In terms of time, the universe is believed to be about 13.8 billion years old. The solar system originated about 5 billion years ago, the earliest forms of life soon thereafter. Humankind is one species among billions of others on earth. It is one of the very latest evolutionary branches among a host of other mammalian species. We don't like seeing ourselves as animals; yet we are. Humans and chimpanzees have about 99 per cent of their genes in common.

Humans have appeared at the tail end of cosmic history. If we assume that the species of *homo sapiens* emerged roughly 200,000 years ago, this constitutes, at best, 0.005 per cent of the 4000 million years of the history of life on earth, or roughly the last 0.0015 per cent of the estimated time since the big bang. The first substantive cave paintings (manifestations of the 'cultural big bang') date from about 30,000 years ago. Historical civilisations appeared at the earliest about 12,000 years ago, which is only the last 5 per cent of the time that *homo sapiens* existed.

<sup>48</sup> B. Swimme, *The Hidden Heart of the Cosmos: Humanity and the New Story*. Maryknoll, NY: Orbis Books, 1996, p. 80.

Both the biblical faith and the Greek roots of modern science found their first consolidated expressions during the ‘axial period’ some 2,500 years ago.<sup>49</sup> That is a quarter of the history of human sedentary culture. Both had antecedents. Both have since traversed an evolutionary trajectory that changed their basic content fundamentally.

Modernity began its meteoric rise only about five centuries ago. That is 4 per cent of the history of human civilisations, 0.25 per cent of the history of *homo sapiens* (taking about 200,000 years ago as point of departure) and 0.000036 per cent of cosmic history. And yet, in this minute stretch of time, an exponential development occurred that was unimaginable in earlier times and that has now become dangerous to our very survival.

#### 4. Cosmic awareness

The Christian faith indeed emphasises the dignity of the individual human being. But today, the individual human being is one of 7 billion of its kind, living in competition with billions of other species on a planet that is just a speck of dust in cosmic space. Do we have any idea what we are doing when we believe that we are the centre of the universe?

In terms of cosmic history, the time span of the predicaments caused by modernity may be minuscule. Our earth has seen massive catastrophes and extinctions before. However, this latest period has seen the exponential rise of an insatiable species to unchallenged prominence and dominance.

It has rendered the network of life on our planet, which has grown over billions of years, exceptionally vulnerable. Regaining comprehensive horizons is today one of the most critically important issues to be faced by believers and non-believers alike. Our needs are inextricably embedded in the needs of the whole of life on the planet.

The vision of ‘comprehensive optimal well-being’ that I posit as the criterion of an appropriate faith entails not just an earthly environment that is healthy and resilient enough to provide for human needs. It is the entire hierarchy of emergences that constitutes the ancestry and the siblinghood without which we would never have come into being and without which we could not sustain ourselves.

Only if we accord this entire hierarchy of emergences the dignity of God’s priceless creation, can we do justice to the economic-ecological problem. Only if ‘nature’ is not just deemed a resource base, meant to be exploited for our need, greed and enjoyment, but describes the very fabric of a reality in which our own feeble being is embedded, shall we begin to sense the kind of anxiety appropriate for our current situation.

Only if all levels of emergence have dignity, can we speak of the dignity of a foetus, an infant, or a person with incurable dementia. Even the biological life operative in a ‘human vegetable’ has a dignity of its own.

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<sup>49</sup> The ‘axial period’ is a term coined by the philosopher Karl Jaspers for a time in history when a surprising number of philosophical and religious innovations happened.

## 5. Existential and social relevance

All this is sobering, humbling, in fact humiliating, but we have to concentrate on what human individuals, communities and societies can know, aspire to, and achieve during their limited life times with their limited means and their limited insights. Cosmic time, cosmic space and cosmic energy are way beyond the reach of our observation, comprehension and manipulation.

We must learn to distinguish, therefore, between the God of theological or philosophical theory—the transcendent Source and Destiny of the cosmos in its multibillion year history, its unimaginably vast expanses, its subatomic, physical and biological complexity, its unfathomable mysteries at all levels, from quanta to collective consciousness—and the God relevant to human lives here on earth at this particular juncture of human history.

The former is beyond our grasp. The latter is the God of the Bible, the One whom we encounter in the gift of life, the demand of authenticity and the invitation to be involved in God's creative and redemptive project. God's project is being conducted on our own little earth, within our tiny historical time span, involving our limited aspirations and energies. This is where the relevance of faith is located. It is our 'life world,' rather than the universe, that has to gain wider horizons if we are to make a difference.

Yet our life world is larger than we think. Enclosed in their narrow horizons and engulfed in their daily struggles, most humans are not concerned about what happens on a global scale. Most are not even remotely interested in the fate of their progeny beyond the lives of their grandchildren, otherwise they would not treat the earth the way they do. I recently read a poster saying, 'The way you treat the earth makes me think you have a spare one in your garage.' Indeed!

The point is that our past-oriented Christian traditions are no longer capable of responding adequately to the needs of a rapidly unfolding future. The evolution of human consciousness accelerates relentlessly, becoming more differentiated, complex and unmanageable. It is difficult to keep abreast; it is much easier to withdraw into our cosy traditional cocoons. But unless we embrace this new level of emergence, we will endanger everything that evolution has brought about over the last four billion years.

### God, the power of cosmic evolution

Having 'reduced' our competence and our responsibility to our life worlds and having 'extended' our life worlds to encompass what happens on our planet, however, we must say with the same breath that the God of our lives and our life worlds can be no other than the God of the universe and of cosmic history.

That is what the Trinitarian doctrine wants to express—the God who disclosed God's intentionality and agency to humans in the Christ event and who invites humans to share in this intentionality and agency through the 'Holy Spirit', is *none*

*other* than the transcendent Source and Destiny of reality as a whole, thus the power of the evolutionary process and the seat of ultimate cosmic authority.

This is serious! Our petty desires and trivial concerns, whether material, social, or spiritual, must be brought back where they belong—into their global and cosmic contexts. This is why the concept of God as the transcendent Source and Destiny of reality as a whole is of such critical importance. It covers reality in its immense spatial dimensions, its multibillion-year history and its unfathomable profundity, yet it pins us down to what happens here and now in our own daily lives.

## 6. The potentials of the human being

Science enables us to see human life in its overall perspective. But it also enables us to see its particular excellence. A biologist once told me that the human being was just a ‘beefed-up baboon’. That is true in many ways. But to plough the human being under as just another piece of earthly material or a particular species among others of its kind takes a valid concern too far. It is science itself that can put the record straight.

The human being is a creature that has attained a level of personal consciousness, a capacity of observation, comprehension, symbolisation and communication, and a versatility of intentions and actions that surpass those of all other living beings on earth by far. Being less constrained by natural laws, biological needs and ingrained instincts than other animals, the human being is ‘condemned to be free’, thus also condemned to be responsible.

Together with some handy physical features, such as an upright posture and a versatile thumb, the human mind makes us something fundamentally different from other mammalian species. The most remarkable feature of humans is their capacity to imagine, think and act beyond their personal and communal interests and their particular life worlds. We are the only creatures that have the capacity to ask where reality comes from, where it is going, what regularities guide its evolution and what causes its demise. We are the only creatures that can ask what reality ought to become.

In other words, humans are capable of objectifying reality, seeing it from above as it were, ‘with the eyes of God’. Doing so, they can visualise their own particular place and function within the greater whole. Only human beings can contemplate the meaning of the cosmic process in general, and of human life in particular. Only the human being has been equipped by evolution with the capacity to have a relationship with an intuited transcendent Source and Destiny of reality, however it may be perceived.

It is this capacity that is not being developed in modernity. It is, in fact, crippled and obstructed by the incessant stoking up of personal desires at the expense of a balanced and fulfilled personal and communal life, a rational and equitable allocation of productive resources, and a judicious dealing with the ecological prerequisites of life. In this sense, modernity has been a retrogressive step in the evolution of

humankind. If we cannot reverse this trend towards senseless consumption and self-aggrandisement, humanity has no future.

## Individualism and spiritualisation

Part of this disastrous development is the individualisation and spiritualisation of the Christian faith. Although every single individual is of infinite worth and dignity in the eyes of God, and although we can all call upon God as our 'heavenly Father', the 'cosmic Christ' of the New Testament cannot possibly be 'my personal Saviour' and nothing more.

What should happen, instead, is that every believer be personally and consciously involved in God's overall creative and redemptive project as manifest in the Christ event. If Christians cannot learn to see themselves within their concentric contexts, they are denying the foundation of their faith, namely, God's creative and redemptive intentionality for the world as a whole.

Seen in cosmic contexts, the only appropriate status that humans are entitled to claim is that of responsible custodians of the life worlds entrusted by God to their care and utilisation. That is the ancient biblical view (Gen. 1:27-31; 2:15). Love of God can manifest itself only as participation in God's creative and redemptive intentionality. It necessarily covers love of one's neighbours, community, society and non-human nature. It also covers love for oneself as a creature of God with its particular excellence, needs and tasks within the whole.

To become part of God's creative and redemptive project is the highest calling humans can imagine or aspire to. It is a calling issued to every single human being. Every other concern should fall into place within this calling. Only when humans learn to become part of the great network of life do they truly belong to God's creation; will they not destroy each other or the infrastructure of their existence; will they have a chance to survive and prosper in the long run.

Revelation in nature and revelation in Scripture are not two different kinds of divine self-disclosure that are in conflict with each other, therefore, but part of the general evolutionary thrust towards comprehensive optimal well-being at different levels of emergence.

## 7. Sin and evil

So far, we have sketched the essential characteristics of an *authentic* human being as the biblical faith perceives it to be. It is a being that shares God's vision of comprehensive optimal well-being. This vision translates into God's concern for any deficiency in well-being in any dimension of life and involves us in God's creative and redemptive action.

This positive characterisation of the authentic human being implies a notion of the *inauthentic* human being, a being that is not what it is meant to be in the eyes of

God. This topic is traditionally dealt with under the concept of *sin and evil*. Science helps us to be more precise in our definitions of these concepts.

Sin is not the same as evil. *Sin* denotes disturbed relationships between us and God and between us and other human beings. In contrast, anything that obstructs human life must be considered *evil*. In this sense, we can speak of ‘natural evil’, such as earthquakes and tsunamis, mosquitoes spreading malaria, deficient immune systems, run-away veldt fires, or the fact that we are vulnerable and mortal beings.

These evils cannot be considered ‘sin’, or the consequences of sin, least of all the consequences of an ‘original sin’ that we inherited from the first human beings through biological procreation. Humans have emerged at the tail end of cosmic history, so natural evil could not possibly have been the result of human sin.

Obviously, entropy, suffering and death are built into the system. The same is true for neurological processes. Survival instincts are situated in the reptile brain. They are indispensable. Emotional faculties are situated in the limbic system and equally important for human life. Rational thought is situated in the prefrontal cortex. While the latter is meant to keep the other two in check, all three are necessary for human life.

Our freedom of the will is not only constrained by sin, but by the regularities that are built into reality. It is also constrained by the parameters that the past imposes on the present and the options available in the future. The idea that a righteous life could do away with such constraints is spurious. Sociological determinants (such as internalised assumptions, values and norms, the effects of enculturation, the ongoing exposure to the *Zeitgeist*, and the power of collective consciousness) evolved in history and are being transferred through communication.

The operation of these mechanisms as such is part of the structures and processes of the universe. It is only a counterproductive *content* of such social determinants, for instance the ruthless pursuit of individual or collective self-interest at the expense of others, its institutional entrenchment, and its ideological legitimation, that can be considered sinful.

Finally, all human decisions are marked by ambiguity. Each realised option cuts out all its alternatives—whether beneficial or detrimental. There is no decision that does not entail what economists call ‘opportunity’ costs.<sup>50</sup> There is no way we can become righteous in one respect without becoming guilty in other respects. It is always a choice between the lesser and the greater evil, the lesser and the greater good. Perfection is impossible in the reality that God created and of which we are a part.

## Is ‘natural evil’ necessarily evil?

As mentioned again and again, many things that we consider evil may be necessary, or at least inevitable. At a cosmic level, nothing at all would happen

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<sup>50</sup> Opportunity costs represent the value of alternative products that could have been acquired with the sum spent on a product or service.

without the energy released by the destructive force of the entropic process. Without the crust of the earth floating precariously on a less than stable mantle, causing earth tremors and tsunamis, life could not have developed on this planet. And as unpalatable as it may seem, death is the prerequisite of life.

Life again has differentiated into species, including those dangerous for human life, such as bacteria and snakes. Together, all species form a closely knit network. Having come to existence, they have a right to exist, whether that seems to be in our interest or not.

Could God not have created a more congenial cosmos? From an experiential point of view, this is a senseless question. Fact is that God has not! We have to deal with reality as it has become, rather than dreaming of a potential reality that does not exist and that has no chance of coming into being. We have to accept that there are ambiguities, regularities and constraints without which reality as we know it could not function.

What we can do, and what we ought to do, is to try and overcome unnecessary suffering and premature death—not only of humans but of all creatures. That is what falls within the ambit of what is possible and what is in line with God's creative and redemptive intentionality as Christians understand it.

### **'Sin' refers to disturbed relationships**

Sin has a different meaning. It denotes unhealthy and detrimental relationships with God. Because God is the transcendent Source and Destiny of reality as a whole, however, this includes our relationship with nature, society, community, other humans, our body and our self.

Sin is a life that is not geared towards God's vision of comprehensive well-being; that is oblivious or indifferent to deficiencies in well-being; that does not participate in God's creative and redemptive project in the world.

Sin can trigger causal sequences of natural evil, for instance, when we pollute the water resources of the earth, destroy our forests, or detonate nuclear weapons. So while not the same as evil, sin can indeed lead to natural evil.

The traditional concept of original sin has become untenable. Sin is a disturbed relationship with God, rather than a genetic property that can be passed on from generation to generation through sexual intercourse and conception. As mentioned above, survival instincts are hard-wired into our reptile brains and emotions emanate from our limbic systems. They are also essential. They cannot be sin as such. But they can lead to sin if they overwhelm the control of the neocortex and lead to injudicious and counterproductive behaviour.

The Protestant tradition maintains that a believer is, at the same time, 'justified and sinner' (*simul iustus et peccator*). The new life of Christ works precisely through our inherent capacities and limitations. The reptile brain and the limbic system are as indispensable as the neocortex. This is how we have been created, and only in this way can we be truly human.

Becoming a ‘new creation’ through faith in Christ (2 Cor. 5:16-18), therefore, our biological, psychological and social endowments are not replaced with something more perfect, but our existential foundation, orientation, intentionality and agency are being transformed under the impact of the message of God’s suffering, transforming acceptance of the unacceptable.

## **Guilt—the sin of the past**

The concept of ‘guilt’ denotes the consequences of sin that originated in the past. The past cannot be undone. Its consequences continue to unfold and will affect the well-being of generations to come. At the very least, guilt must be acknowledged and regretted. The perpetrator should make some effort to compensate for the harm done.

As far as restitution is not possible, however, its detrimental consequences must be borne by God, by the victims, by the community and by other creatures, otherwise there can be no peace. Forgiveness means that the victims explicitly take upon themselves the consequences of sinful acts committed by the perpetrators so as to make reconciliation and a common way forward possible.

These concepts and rituals are derived from experiences that are typically human. Trees and antelopes do not accuse or forgive those who destroy their lives. But they still have to suffer their destruction. It is arbitrary and counterproductive, therefore, to reduce these concepts to the interpersonal sphere.

To believe in God means to see the whole of reality in its intricate network of relationships. Reality includes non-human nature as much as the impersonal structures and processes of society. To become guilty against nature and society is to become guilty against God.

### **Reader reaction**

Which of my contentions about the biological and spiritual character of the human being can you confirm, critique or augment?

Does my focus on the particularities of the Christian faith lead to arrogance and intolerance?

How would you summarise the gist of my contents and your response to a high school student?

## Let us summarise

In this chapter, we dealt with the 'real' human being, as seen by the sciences, and the 'true' human being, as seen by the Christian faith. Section I dealt with the real human being as a *biological* creature amongst billions of others. Human life has a beginning, duration and an end. The human organism is composed of trillions of components interacting with each other in a co-ordinated fashion.

This is made possible through intricate information systems that work throughout the body and that are geared to its internal stability. To maintain its internal balance (homeostasis), the brain produces neurological and chemical reactions to deficiencies or surpluses in the brain, which then cause positive or negative feelings. The existence of such feelings is not a mystery. It is simply the brain experiencing itself from within its operations.

The brain is the command centre of the organism. Its main functions are performed by brain cells linked with each other through synaptic connections. It is composed of three main sections: the reptile brain that hosts survival instincts, the limbic system that is responsible for emotions and the pre-frontal cortex where rational assessment, planning and decision-making are located.

In Section II, we dealt with consciousness, or the *mind*. It is a new level of emergence that presupposes a functioning brain. The brain functions at different levels: genetically based reactivity, automated responsiveness and consciousness proper. There can be no dualism, therefore, between body and spirit (or soul). But the spirit can also not be reduced to lower (biological and physical) levels of emergence.

Subjective experiences are caused by the constant flow of brain states within certain constraints and following certain patterns. Consciousness again differentiates into levels such as the subconscious, the conscious and self-consciousness. There is upward and downward causation between the subconscious and the different forms of consciousness.

Memory is constituted by synaptic networks that can be switched on or off. The structure of synaptic networks is cast into symbolic representations that can be transferred from one human consciousness to another. The constant flow of information between a great number of consciousnesses leads to the emergence of a collective spirit.

In Section III, we dealt with the necessity and character of a *system of meaning*. We considered the fact that the past opens up a range of possible futures that have beneficial or detrimental consequences. This calls for responsibility. Collectives develop a system of meaning with criteria of acceptability and allocations of authority (statuses and roles) that channel behaviour in particular directions. The brain screens the inflow of new information, which will be integrated, adapted, or rejected on the basis of the existing system of meaning.

Ethical values and norms may have been the result of their survival value for the individual, the community, or the species, but humans are also capable of transcending their own interests towards the interests of greater wholes. Modernity has increased the power of humans at such a rate that the generation of wider horizons and concomitant ethical precepts has not kept pace.

In Section IV, we addressed the issue of the *content* of a system of meaning, its criteria of acceptability, and its allocations of authority. This brought us to what the Christian faith considers to be the *true human being*. While all humans are of equal dignity, it does not follow that all systems of meaning can claim the same quality and validity.

According to the Christian faith, human authenticity is defined as participation in God's vision of comprehensive optimal well-being, God's concern for any deficiency in well-being, and God's creative and redemptive project in the world as manifest in the Christ event.

While humans should become conscious of their minuscule stature in the context of cosmic reality, they can only deal with what is located within their insight, reach and competence. In this limited sphere, they must develop responsibility for the whole and refrain from individualism and the spiritualisation of their faith.

Evil is anything that obstructs the survival and flourishing of life. The proclamation of God's benevolent intentionality may lead to the realisation that aspects of reality we experience as evil are necessary in terms of the functioning of reality as a whole.

Sin is the estrangement of humans from God, the transcendent Source and Destiny of reality as a whole, thus also from the different components or aspects of this reality—other humans, community, society and nature. Guilt is sin located in the past. Its consequences cannot be undone. It calls for restitution, forgiveness and reconciliation.

# 9

## Jesus Christ — the ‘real’ representative of the ‘true’ God

### Reader reflection

Jesus Christ is the pivotal centre of the Christian faith. The issue in this chapter is in which ways Jesus of Nazareth was a human being like all of us, and in which ways he was something entirely different.

Consider the options: Jesus was God ‘himself’ under the guise of a human being; Jesus combined a strange mixture of divine and human characteristics; Jesus was a normal human being gifted with divine insight and power; Jesus was a morally outstanding person and an example to be followed; Jesus was nothing but a Jewish rabbi, at best a ‘prophet’, whose significance was blown up out of all proportions by his followers after his death.

Can you think of biblical texts that seem to support any of the options above? Which of these options do you deem plausible from a scientific or historical (experiential realist) point of view?

### What this chapter is all about

‘Jesus is the Christ’ (or ‘Jesus is Lord’) is the most original, elementary and distinguishing confession of the Christian faith. ‘Christ’ is a title for the messianic representative of God expected by the Jews during the time of Jesus. In this chapter, we try to understand the ‘Christ event’ in the light of a historical approach to the Bible.<sup>51</sup>

Many contemporary biblical scholars are dismissive of the historical-critical approach to the Bible, especially those informed by postmodernism on the one hand, fundamentalism on the other. But for the interaction between faith and science, it is the most appropriate approach. It emerged from the scientific demand that we distinguish between historical

<sup>51</sup> Because Christ is the pivotal centre of the Christian faith, it may surprise my readers that, in the previous two chapters, I dealt with the concept of God and with the concept of the human being first. But Christ can only be understood against this background.

events, the interpretation of such events by the ancient believers on the basis of their Jewish and Hellenistic traditions, and the mythological language in which the latter expressed their convictions.

This task is anything but straightforward. The documents of the New Testament do not lend themselves to such a distinction. As mentioned in chapter 5, ancient authors were not guided by the criteria of empirical veracity and historical precision set up by the Enlightenment. Wanting to proclaim the Gospel of Christ, and nothing else, they used all the linguistic and cultural means available to them at the time. They even changed the traditions they inherited, if this seemed to enhance the understanding of their message by their readers. The best we can do, therefore, is to come up with the most plausible conjecture of what might have happened.

Again, we distinguish between Jesus of Nazareth as a *real* human being (a biological, social and spiritual creature located in time and space), on the one hand, and Christ as the prototype of the *true* or authentic human being (the human manifestation of God's creative and redemptive intentionality), on the other.

## Section I

### A historical reconstruction of the Christ event

The Christian faith is based on what happened in connection with a concrete human person in concrete human history. Let us summarise it as the 'Christ event'. Our consideration of who Christ is must begin, therefore, with Jesus of Nazareth as a Jewish rabbi that lived and died in Palestine roughly two millennia ago.

If we take the following three assumptions of the Jewish faith at the time into account, the Synoptic accounts of the crucifixion and resurrection of Jesus allow for a fairly plausible historical conjecture of what may actually have happened.

1. According to the Israelite-Jewish faith, God is the transcendent Source and Destiny of reality as such and as a whole. Being transcendent, God manifests God's creative power and God's benevolent intentions through immanent reality—whether human or non-human. The *Torah*, the law of Moses, embedded in the covenant between Yahweh and 'his' people, is pivotal in this regard.
2. In the Ancient Near East, the king was proclaimed, anointed and installed as the 'Son of God', that is, God's representative on earth. It was expected that God would uphold God's cosmic (moral, social and natural) order and channel God's blessings to his people through 'his' royal representative.
3. By and large, the Israelite kings disappointed these expectations. They were seen to be idolatrous, selfish and unjust. This gave rise to the prophetic expectation of a genuine king and representative of God, the 'Anointed' (Hebrew: *Mashiach*, Greek: *Christos*). That is the origin of Jewish-Christian messianism.

## The conflict between Jesus and the Jewish leaders

The first followers of Jesus were so impressed by his proclamation of the imminent arrival of the Kingdom of God, his teaching and his redeeming action, that they gradually began to see him as the messianic king expected by the Jews. The Synoptic tradition suggests that Peter was the first to gain that certainty, although he still expected him to become a messiah of power and glory (Matt. 16:13-23). This expectation was shared by the other disciples (Matt. 20:17-28).

In fact, however, the ministry of Jesus manifested *God's suffering, transforming acceptance of the unacceptable*, in contrast with a demanding, judging, condemning and rejecting divine law. This experience undermined three essential components of the Jewish faith at the time:

- (a) The Deuteronomic law had promised God's blessing for the *righteous* (understood as absolute obedience to the code of precepts and demands as formulated in the *Torah*) and threatened the *transgressors* with the curse of God (Deut. 28; 30:15-20).
- (b) The priestly law was built on the premise that the failures of the community and the individual demanded recompense and reconciliation in the form of highly specified and elaborate sacrifices given to God through the priests. At a more mundane level, the priestly cast depended on this institution for their income and status in society.
- (c) The priestly institution administered not only an elaborate code of 'moral' laws, but also an elaborate code of 'purity' laws, according to which certain dispositions and situations were deemed 'unclean', thus unacceptable in terms of the holiness of God. The concept of ritual purity led to an elaborate system of obligatory observances.

According to the sources, this perception of the will of God had led, on the one hand, to a kind of crippling and uncompromising legalism and, on the other hand, to a fiercely judgmental attitude towards those who dared to transgress any aspect of the *Torah* or who sympathised with them. In fact, according to the law found in Leviticus and Numbers, people who had committed certain transgressions had to be 'cut off from among their people', or 'stoned to death'.

This is where the conflict between Jesus and the Jewish leaders arose. Jesus undermined the *Deuteronomic* law in that he approached notorious sinners (such as prostitutes and tax collectors) with the accepting and redeeming love of God, rather than the condemning law. He undermined the *purity* laws by touching, accepting, or healing those deemed unclean (menstruating women, lepers, corpses), rather than shunning them.

Upon his entry into Jerusalem, he challenged the *sacrificial* institution head on by cleansing (presumably with his followers) the temple of the lucrative businesses that had sprung up to facilitate the sacrifices in the temple. Apparently, he claimed divine authority to perform these acts by calling himself (or being called) the 'Son of Man', one of the traditional messianic titles derived from Daniel chapter 7.

The messianic king was believed to be the representative of God on earth. In Judah, royalty was promised to the Davidic dynasty. And indeed, the latter continued on the throne up to the exile. The prophets thus envisaged the messiah to be a descendant of David. Expecting Jesus to be the messianic king, his followers may have applied the title ‘Son of David’ to Jesus, when he marched into Jerusalem (Matt. 21:9).

As mentioned before, all traditional Jewish titles applied to Jesus in the New Testament were royal titles: Son of God, Son of David, Son of Man, Lord (Greek *kurios*), the Anointed (Hebrew *Mashiach*, Greek *Christos*), Shepherd, etc. It was the claim that Jesus acted in the authority of the messianic king while undermining the Jewish law, whether made by himself or his followers, that caused the upheaval.

To complete the picture, one has to remember that there had been a fierce conflict between prophets (focusing on moral righteousness) and priests (focusing on ritual observances) in Old Testament times. By the time of Jesus, the priestly line had become dominant. Prophecy was believed to have become dormant. The *Torah* was believed to be the final revelation of Yahweh. It contained the moral, social, ritual and institutional laws of the Jews. The Pharisees were particularly meticulous adherents to the law. That the messiah would undermine the *Torah* was unthinkable.

One also has to remember that originally, the king had priestly functions in the Ancient Near East. They were later delegated to professional priests, but under royal authority. After the exile, however, the high priests assumed the function of the leadership of the Jewish people and, in time, assumed the status of royalty. There was a latent tension, therefore, between (Davidic) royalty and (Levitic) priesthood. The claim to royal authority was also the prime reason for the intervention of the Roman imperial authorities.

There is no question, therefore, that Jesus posed a serious challenge to the Jewish faith assumptions and institutions prevalent at the time. It was only natural, then, that the high priest, the Pharisees (who followed the *Torah* meticulously), the teachers of the law (the ‘theologians’) and the elders (who formed the Sanhedrin—a Jewish second tier government subservient to the Roman overlords) were highly alarmed. Often at loggerheads with each other, they formed a rare coalition and conspired to arrest, condemn and do away with him.

## The condemnation and execution of Jesus

On all these counts, conflict was built into the evolving situation. After his triumphant entry into Jerusalem and the cleansing of the temple, Jesus could preach openly in the temple as long as he was surrounded by his followers and the authorities feared a commotion during the Passover festival. However, at night, he had to go into hiding.

Seemingly, the Garden of Gethsemane offered the kind of obscurity he needed. Judas, one of his disciples, revealed this place to the ‘security forces’ and he was captured there. In his trial by the Sanhedrin, he was asked whether he deemed himself the ‘Son of God’, thus the expected messianic king. When he confirmed this, he was accused of blasphemy.

To claim the status of the messianic king could not have been blasphemy in principle, because the Jews expected such a king after all. The arrival of the messiah was expected to occur with an immense show of glory and power, against which his procession into Jerusalem could only have constituted a caricature. So why bother?

Maybe the following was large enough to constitute a real danger to the system, especially since great numbers of people had flocked to Jerusalem for the Passover festival and emotions were running high in the population.

However, the real offence was that he claimed messianic authority for his attitude and behaviour in undermining the Deuteronomic, sacrificial, and purity laws and the established religious institutions. To go against God’s revealed law in the name of God—that was indeed blasphemy in terms of the assumptions prevalent at the time! So he was condemned to death by the Sanhedrin.

The Jewish leaders then reported him to the Roman governor and accused him of sedition. The Sanhedrin was a form of ‘indirect rule’ that was accountable to the Roman overlords. So, a threat to the Jewish institution could indeed be considered a threat to interests of the Empire.

However, to accuse Jesus of blasphemy would not have had traction in the estimation of the Roman authorities, because they left the religious life of the Jews to its own devices. Before the Roman court, the question was not whether he was a heretic in terms of the Jewish religion, but whether he claimed to be the ‘King of Israel’, which implied rebellion against the Roman authorities.

Because the procession of Jesus into Jerusalem was unarmed and because Jesus apparently wanted to change the Jewish faith from within, rather than through an armed rebellion, the governor found it difficult to condemn Jesus in terms of Roman law.

One must concede, however, that any claim to divinely sanctioned leadership had to be looked upon with suspicion by the Roman authorities. Fearing a commotion during the festival, when Jerusalem was packed with people from outside the city, the governor found it expedient to buy into the arguments of the Jewish leaders and had him crucified for sedition. It could do no harm to warn the people that Rome would tolerate no nonsense.

The fact that the cross bore the label ‘King of the Jews’ is one of the few historically clear indications that he was indeed executed by the Romans for leading a rebellion against Roman authority. In sum, Jesus was done away with because he claimed divine authority for undermining Jewish religious certainties and institutions and for challenging the authority of the Roman state.

## **The elevation of Jesus to divine authority**

His followers were devastated and fled, probably back home to Galilee. But then, beginning with Peter, they had a number of visions convincing them that Jesus was alive and had been elevated by God to universal messianic authority (1 Cor. 15:3-8). In these visions, Jesus sent them into the world to proclaim the Gospel of God’s creative and redemptive intentionality as he had done when on earth (compare Matt. 9:35-4 with 10:7-8).

Note that the appearances of the ‘risen Lord’ were invariably connected with the commission to spread his Gospel abroad (Matt. 28:16-20; Mark 16:9; Luke 24:49; John 20:21;

Acts 1:8; Gal. 1:1 etc.). This commission was based on the conviction that ‘all authority in heaven and on earth’ had been given to him (Matt. 28:18; Eph. 1:20-23).

So, according to his erstwhile followers, he was indeed the messianic king after all—a king not only of Israel, but of humanity as a whole! This is what the metaphor of being ‘seated at the right hand of God’ means. Traditional titles of the messianic king—Son of God (Ps. 2:7), Son of Man (Dan. 7:13-14), Son of David (Ps. 89:4-5) and ‘the Anointed’—were applied to him.

In subsequent decades, a number of contradictory legends spun around these initial visions (e.g. the women at the empty grave, the Emmaus travellers, appearances to fishermen, etc.), but they did not change the basic message, namely that God had vindicated his proclamation and enactment of the redeeming love of God, rather than God’s condemning law, and elevated him to the status of the messianic representative of God.

In sum, God had identified ‘himself’ with the ministry of Jesus, installing him in a position of ultimate authority (Rom. 1:3-6) and empowering the community of believers to continue with his mission to humanity as a whole. The break between traditional Judaism, as operative at the time, and the emerging Christian faith reflected, therefore, a controversy about the self-definition of Yahweh as the God of Israel and the God of all humankind.

## **Did Paul invent Christianity?**

It is often alleged that Jesus was nothing but a Jewish prophet, an erstwhile disciple of John the Baptist, whose ministry continued in the tradition of the old Israelite prophets. It is also alleged that Paul was the actual originator of Christianity as a ‘new religion’.

If my reconstruction is anything to go by, this just cannot be true. Once one recognises what was actually at stake in the conflict between Jesus and the Jewish leaders of the time, one will discern the essential continuity between Jesus and Paul.

If the ministry of Jesus had been completely in line with the Jewish prophetic tradition, the violent clash between them and Jesus would be implausible. Controversies about the interpretation of the Jewish faith abounded at the time, without leading to such radical measures. This interpretation can also not explain why all the titles of Jesus found in the New Testament were royal, rather than prophetic titles.

Initially, some of his followers, or those impressed by his deeds, may have seen in him a prophet, but that never became a dominant interpretation. We find this tradition only in Matthew and Luke (Matt. 13:57, 21:11; Luke 7:16; 13:33; 24:19), nowhere else. In John, it is not the disciples who take him to be a prophet (John 4:19, 6:14; 7:52, 9:17).

The singular ascription of a ‘priestly’ status to Jesus by the Letter to the Hebrews emerged as a theological innovation long after the event. It built on the tradition of Melchizedek (= king of righteousness), the legendary priestly king of Jerusalem who had ruled before David conquered the city. It is this king who has been designated ‘Son of God’, and therefore as priest (Heb. 5:1-6). The letter is the attempt of a creative Christian theologian to appropriate the Jewish royal-priestly tradition for Christ.

If the idea that Jesus was nothing but a Jewish prophet and that Christianity was the invention of Paul was true, Paul’s conversion from persecutor to dedicated disciple and missionary would not make sense. In fact, Paul inherited and conceptualised the conflict between Jesus and the Jewish leaders. This conflict perpetuated itself in Paul’s own clash with those committed to established Jewish assumptions, institutions and rituals.

Do any of my statements above make you suspicious that my theology is on a heretical track?

## Section II

### Jesus of Nazareth—the ‘real’ representative of the ‘true’ God

You will have noticed that, so far, I have followed the approach of experiential realism quite slavishly. There is nothing supernatural in my story. Now, let us reflect on the theological consequences of my historical reconstruction.<sup>52</sup>

The first question is whether Jesus of Nazareth was divine or human. From an experiential point of view, a transcendent entity cannot be part of immanent reality. For the dialogue between science and faith, it is important to emphasise the self-evident, namely, that the historical figure of Jesus of Nazareth, as depicted in the New Testament, was *ontologically* a human being, rather than God.

The proclamation that God disclosed God’s intentionality through the life, ministry and fate of this human being does not imply that this human being was ontologically different from other humans, let alone that he was *identical* with God. It means, rather, that Jesus *identified* with God’s redemptive intentionality and that God identified with Jesus’ proclamation and enactment of God’s redemptive intentionality.

It also means that the contemporaries of Jesus encountered the intentionality of God, thus the living God ‘himself’, in this particular human life. And as far as they responded positively, they were drawn into its dynamic.

It is rather odd that countless Christians believe that Jesus was God ‘himself’. With this, they undermine the credibility of the Christian message among people informed by modern science. They also undermine the credibility of their message in terms of the ancient Israelite, Jewish and Muslim contexts. According to these traditions, a human being cannot be divine—and they are absolutely right.

They also undermine the very rationale of the ‘incarnation’, as believed by Christians, namely *our participation* in the new life of Christ in fellowship with God. We cannot become divine, after all, but we can become Christ-like, if ‘Christ’ signifies authentic humanity.

According to the entire witness of the New Testament, Jesus was a human being. He was conceived, born and raised to adulthood; he lived in a particular geographical space and in a

<sup>52</sup> Suggested reading: A. Peacocke and Ph. Clayton (eds), *All that Is: A Naturalistic Faith for the Twenty-first Century: Theology and the Sciences*. Minneapolis: Fortress Press, 2007, pp. 29-41.

particular historical period; he was embedded in a particular religious and cultural context and lived under particular political circumstances.

He recruited followers as a Jewish rabbi and helped people in need within the constraints of space, time and energy. He made enemies in Galilee and clashed with the Jewish establishment in Jerusalem. He was condemned as a heretic and impostor by the Jewish authorities. He was tried, tortured and executed under the Roman governor on charges of sedition.

All this shows that Jesus had a limited human lifetime that began with his conception and ended with his death and a limited geographical reach within a specific political, social, religious and cultural context. His ministry was marred by human conflicts and ended in a human catastrophe. What followed after his death falls into a different category altogether, to which I will presently return.

The authors of the New Testament testified to the relation between God and Jesus in terms of the Jewish concepts of intentionality and agency, rather than Hellenistic ontological concepts. The Gnostic idea that he was God in a pseudo-human garb was rejected in New Testament documents (Rom. 1:3; 1 John 4:2) and declared a heresy by the 'orthodox' ecclesial authorities of later centuries.

The Church fathers expressed a similar view but cast it into the static terms of Hellenistic ontology that were in vogue at the time. The Council of Chalcedon (AD 451) declared that Christ encompassed, in one and the same person, a fully divine nature and a fully human nature, which should *not be separated* but which should also *not be confused* with each other.

At the Council of Constantinople (AD 680/1), the same formula was used for the relation between God's will and the will of Jesus. While this ontological expression of the relationship between God and Jesus led to paradoxical formulations, the intention remained clear: The Creator acted *in and through* the actions of a creature that was open for such action. Both subjects retained their ontological integrity.

Expressed in my terminology, God manifested God's redemptive intentionality and agency (in the Bible often associated with the divine Spirit) in and through the commitment, insight, teaching and action of his messianic representative. The statements that Jesus was 'in the likeness of God', that he came from God and was sent by God, do not imply that Jesus was God.

According to Genesis 1:27ff, the authentic human being is 'created in the image of God'—which here means that humans have been entrusted with authority over the rest of creation as representatives of God (Gen. 1:28 ff), rather than being divine. In 2 Corinthians 3:17, 4:4 and Philippians 2:6, Paul presupposes that Christ is the authentic form of this image, into whose likeness we are to be transformed (2 Cor. 3:18; 4:4; cf Col. 1:15).

In Romans 5:12-21, Christ, the authentic human being, is juxtaposed to Adam, the inauthentic human being. The two prototypes are both 'men' (humans). They do not represent the difference between humanity and divinity, but between sin and righteousness, law and grace, condemnation and justification, death and life, past and future, thus inauthenticity and authenticity, respectively.

In 2 Corinthians 5:19, Paul says that God was *in* Christ, not *identical* with Christ. The statement that Christ 'came from God' (Phil. 2:6; John 3:13 and other places) harks back to Daniel 7:12, where we find the notion of an authentic (human) ruler. He was a 'Son of Man', thus a human being, but he was 'presented before' God and 'given dominion and glory and kingship'. 'Coming with the clouds of heaven', he was meant to replace the pagan despots here depicted as beasts. The rest of the chapter makes it clear that it also referred to the (human)

collective of the 'holy ones of the Most High' (7:22; 27). Similarly, the followers of Jesus were expected to be granted the same authority and continue with his mission.

Note that the concept of the 'Son of Man' as a human being called by God is also applied to the prophet in Ezekiel 2:1-3 and throughout the book. In fact, it is a common Hebrew term for human beings as vulnerable and mortal beings, especially during the time of the exile (Ps. 8:4; 80:17; 144:3; 146:3; Isa. 51:12; 56:2; Jer. 50:40; 51:43; Dan. 8:17).

The idea that Jesus was God is based on a wrong interpretation of the Gospel of John and similar texts. John 1:1 does not refer to Jesus directly but to the creative *Word* of God (according to Gen. 1) or the creative *Wisdom* of God (according to Sirach 1:9 and Wisdom of Solomon 7:22), or the *Logos* that underlies the structure of the cosmos in Greek thought.

The *Logos* is here specifically defined as 'grace' or 'love' (John 1:16-18; 1 John 4:7-17). These terms are intensely personal. They proclaim God's benevolent intentionality that manifested itself in 'the flesh', that is, in a human being acting as the messianic 'Son of God' (John 1:1-18). In Christ, God acquired a human face for us, as it were. God manifested 'himself' personally in the person of this human being.

It is this *Logos*, this creative and loving intentionality of God, rather than the historical human being in whom it manifested itself, that was 'before all things' (John 1:1); that 'was God' (= divine) in the sense that it was 'with God' (1:2); that penetrates all things (1:3); that underlies God's creative action and grants life (1:3); that is the 'light of the people' (1:4); that shines in the darkness and that the darkness could not overcome (1:5); that was (at all times) in the world because the world came into being through it (1:10); but that the world did not know (1:10); that humans did not accept (1:11); that empowered those who accepted it to become 'sons (and daughters) of God' (1:12), by being 'born of the will of God' rather than the flesh.

Colossians 1:15-19 says the same thing in different words. He is the 'image of God', the 'firstborn of all creation', who was 'before all things', in whom all things were created and in whom all things hold together. All these things are said of God's 'Wisdom' in Jewish wisdom literature.

And it is this 'fullness of God' that was 'pleased to dwell in him' and to reconcile all things in heaven and earth to God through the cross of Christ. God's *intentionality* 'became flesh', that is, it manifested itself tangibly in the form of a living human being (John 1:14; 1 John 1:1 ff; Col. 1:19). But that does not mean that this human being was God.

For us, God is identical with his creative and loving intentionality (John 1:1) because that is all we know and can ever know about God (1 John 4:16). That the divine intentionality manifested itself in the life, ministry, death and elevation of Jesus does not imply that Jesus of Nazareth, the biological human being, was literally 'pre-existent' in heaven; that he was responsible for the creation of the world; that he 'came into the world', that he 'left' the world for heaven and that he would 'return in glory'. All these expressions are metaphors, as they were intended to be, drawing on the Jewish traditions of the time.

That also becomes clear in the rest of the Gospel of John. When Jesus prays to God (John 17), God certainly does not pray to 'himself', but Jesus prays to the 'Father' who had sent him. 'The Son can do nothing of his own accord' (John 5:19 f); it is the Father that acts through him (John 14:8 ff).

The manifestation of God's redeeming intentionality in an authentic human being is the 'window', as it were, through which we 'see the Father' because 'the Father is in him' and 'he is in the Father'. This is why Thomas calls him 'my Lord and my God' (John 20:28).

As mentioned above, God's intentionality manifested in Christ is specified as 'grace and truth' in contradistinction to the law of Moses (John 1:17 ff). We are

supposed to share his life by ‘remaining in the love of God’ (John 15:5, 9 f, 12 f) and thus to know who God really is, namely, the God of self-giving love (1 John 4:7-21).

## The substantive content of the Christ event

This brings us to the aspect that really matters. In which sense was Jesus the ‘true human being’, in whose life, death and elevation the ‘true God’ manifested ‘himself’? Of course, the quest for human authenticity did not begin with Jesus of Nazareth. Its trajectory goes back to times immemorial. It is one of the driving forces of all religious convictions.

What differs between them is how authenticity is defined. The concept of what constitutes human authenticity found a specific and dynamically evolving expression in the history of Israel. It solidified in the form of the Mosaic law. The rationale of the Mosaic Law was recognised already in the Israelite-Jewish tradition as loving God above all else and one’s needy neighbour as oneself.

This insight became pivotal for the proclamation and ministry of Jesus of Nazareth and the emerging Christian Church (Mark 12:28-34; cf Rom. 13:8-10). For Christians, Jesus was ‘the Christ’ (the messianic representative of God), *because* he represented and manifested God’s creative and redeeming love.

As such, he has become the prototype of the authentic human being, in whose life we are meant to participate. Four interlinked aspects can be distinguished in this respect: his assumed *authority*, the content of his *ministry*, the significance of his *death* on the cross and his *elevation* to the ‘right hand of God’.

## The authority of Jesus

According to the Gospels, Jesus claimed to be acting in the authority of the ‘Son of Man’, the expected messianic representative of God. What made this particular human being the centre of the Christian faith was not the claim that he was God, therefore, but the conviction that God’s creative and redemptive intentionality manifested itself in the proclamation, life and ministry of Jesus of Nazareth.

This happened in a way that differed fundamentally from the Jewish religious tradition within which he operated. For that to be legitimate, he had to act with divine authority. The pervasive imagery used in the New Testament for the authority of Jesus of Nazareth is the Ancient Near Eastern assumption that the king was the adopted ‘Son of God’, that is, God’s representative and plenipotentiary on earth (Ps. 2). The king’s duty was to maintain the moral, social and cosmic order and to channel divine blessings into the nation. This is the imagery on which the Jewish messianic expectations were based and which was applied to Jesus.

As mentioned above, all the titles appropriated by Jesus himself or attributed to Jesus by his followers were royal titles: the ‘Son of Man’ (harking back to Dan. 7), the ‘Son of God’, (harking back to Ps. 2), the ‘Son of David’ (harking back to promises made to the Davidic dynasty) and the ‘Anointed’ (*Mashiach, Christos*). The Letter to the Hebrews links him with

Melchizedek, the legendary priestly king of pre-Davidic Jerusalem (harking back to Ps. 110:1-4).

For Christians, Jesus Christ represents a humanity that is entitled and empowered to act in the authority of God. What makes Jesus special in terms of the Christian faith is not that he was divine, therefore, but that he was authentically human by representing the ‘true nature’ of the God of Israel and by being used by God to manifest God’s benevolent intentionality.

To be authentically human is to have a relation with God that is not obstructed by human ambitions to seize sovereignty, mastery and independence from God, the Creator of reality. *Jesus’ intentionality and agency fully reflected and thus manifested the creative and redemptive intentionality and agency of God.* He was the prototypical agent of God’s dealings with God’s world.

## The meaning of his ministry

Authority is only the formal aspect. What matters is the substantive meaning, that is, what Jesus actually stood for in the name of the God of Israel. Jesus redefined royal authority in terms of selfless service (Mark 10:35-45; cf John 13:1-17), rather than despotic rule (Ps. 2).

His followers recognised in his ministry the ‘Prince of Peace’ announced in Isaiah chapters 9 and 11 (among other texts), whose rule was marked by justice and loving concern to such an extent that he did not need an army to keep order and that (figuratively) even the conflict between animals subsided (Isa. 9:2-7; 11:1-9).

The unarmed and peaceful procession into Jerusalem seems to bear that out. When his mission ended with his condemnation by the Jewish leaders and his execution by the Roman authorities, they recognised in the crucified Jesus the image of the ‘suffering Servant of God’ described in Isaiah 53, who became the victim of the sins of others, whose suffering brought about their reconciliation and led to their ‘righteousness’.

It is this redefinition of leadership in the authority of God that really matters. Jesus preached and enacted God’s suffering, transforming acceptance of the unacceptable. He invited sinners, outcasts and lepers into his fellowship. He dealt with all kinds of human needs. ‘The sick need the doctor, rather than the healthy’ (Luke 5:31). Acceptance, forgiveness and healing were manifestations of God’s redeeming love.

For the Pauline tradition, ‘justification’ by grace accepted in faith, rather than moral achievement or excellent disposition, is the most fundamental aspect of the Christian faith. The transformation of the sinner was no longer deemed a *precondition* of divine acceptance, but its *consequence*. This stance is summarised by a disciple of Paul in Ephesians 2:1-10.

As Romans 13:8-10 shows, the essence of the law is participation in God’s redeeming love, rather than observance of a static code of laws. We are accepted by God’s grace into his fellowship, and we participate in this acceptance by accepting each other within this fellowship. We have seen that John articulated the same message of sacrificial and redeeming love.

## Consequences for our relationships

The fact that a meticulous fulfilment of the Mosaic Law, in fact any moral or ritual law, was no longer deemed a condition of acceptance had dramatic consequences for our relationship with God. But it also led to fundamentally changed *inter-human* relationships, whether individual or communal.

Non-Jews, outcasts, sinners, strangers, enemies, women and slaves were accepted into the Christian fold. The new approach also had the potential of reconstituting human attitudes towards *society as a whole*. The social-ethical consequences of the Christian message are profound.

On this basis, traitors, criminals, delinquents, gays, handicapped persons, persons with incurable diseases such as AIDS, slaves, heretics, persons with other religious convictions, political opponents, even dangerous enemies can be accorded human dignity and basic human rights. Looking at the history of cultures the world over, these assumptions are anything but self-evident!

If one takes the statement seriously that God is the Source and Destiny of reality as such and as a whole, it also changes human attitudes towards the *natural* world. Plants, animals, ecosystems and the intricate balance of nature on earth acquire a dignity of their own, even where they seem to threaten human survival, health and prosperity. There is a difference between legitimate defence against such threats and the brutal subjugation, exploitation and destruction of nature.

So the entire concept of what ought to be is placed on a new foundation. Nothing is the same any more. Once again, the foundation of the Christian faith is the announcement and enactment of *God's suffering, transforming acceptance of the unacceptable* by Jesus of Nazareth. It is this content that makes Jesus the 'Christ', that is, the messianic representative of God.

Christians are persuaded that the God represented by Christ is the *true God* and Christ is the *true human being* because he represents the true God, that is, the God of redeeming grace. The benevolent intentionality and agency of the true human being is a manifestation of the benevolent intentionality and agency of the true God.

## Getting rid of ideological abuses of faith

If God's intentionality has been defined by what happened in the ministry of Jesus of Nazareth, culminating in his crucifixion, we can no longer condone the abuse of faith in God to *legitimate* exploitative economic pursuits, oppressive social and political structures and the callous destruction of our natural environment, whether in the family, the church, or in society.

That is just not the kind of God that Christians are supposed to believe in. Because Christ became a servant, leaders who take their cue from Christ become servants of their subordinates (Mark 10:35-45; John 13:1-17; Phil. 2:5-11; 2 Cor. 1:24). And in some sense, we are all leaders. We all have power and influence. There is always something over which we have control.

The use of religion for the ideological legitimation of the pursuit of power, status, wealth and privilege at the expense of others has been a problem in all cultures throughout human history and the world over. This scourge did not bypass the biblical tradition. I have repeatedly referred to the fact that, in the Ancient Near East, the king was believed to be the 'Son of God', that is, God's representative on earth.

As such, the king had the right and the duty to subdue all of humankind. As mentioned above, Psalm 2 seemingly reflects the enthronement ritual of a Davidic king. Taken at face value, it is a disconcerting example of the religious legitimation of imperial and oppressive rule. All the earth is given to the king as his rightful heritage. All other kings are supposed to submit to his authority. The heavenly king 'himself' scoffs at any rebellion against 'his' earthly representative.

In biblical history, this ideology was progressively undermined and ultimately turned on its head. Jesus declared the oppressive model of Psalm 2 'pagan'. And indeed biblical scholarship traced the origins of this paradigm to ancient Egyptian examples. The Egyptian pharaoh was deemed the son of the sun-god, Re or Ra.

Jesus, in contrast, defined messianic leadership as humble service (Mark 10:35-45; cf. John 13:1 ff). The Apostle Paul applied this principle to his own apostolic authority (2 Cor. 1:24). It is a prime example of how God enters human reality to change it from within.

The model of Psalm 2 should have lost its legitimacy within a Christian context from the very outset. Alas, it was just too alluring to be left alone. The gospels speak of ambition and rivalry among the disciples of Jesus. The letters of Paul reveal intense power struggles among the apostolic leadership of the early Church. These struggles became intense and often violent under the regime of the bishops, metropolitan bishops and patriarchs, modelled after the Roman political system.

With the 'conversion' of Constantine, at the very latest, Christian leadership again assumed the arrogant and oppressive features of Psalm 2. Art works of the time depict Christ as a majestic and stern emperor. Developments in the Church reflected what happened in the state. The Roman bishop claimed to be the *vicarius Christi*, the sole representative of the heavenly king and the bearer of universal authority. Christian emperors claimed the same status for themselves, leading to bloody and drawn-out conflicts between the two offices of pope and emperor.

When feudalism began to crack, princely absolutism took its place. The ruler claimed to have received absolute authority over his subjects 'by the grace of God'. Western dictatorships secularised the legitimating higher authority as the 'nation', or the 'people', or the 'class', but did not change the model. Examples from recent history abound. Hitler and Stalin are only the most frightening outgrowths of a common trend.

The underlying assumption does not necessarily change when it is appropriated by individual citizens. The current explosion of corruption in many parts of the world, including the West, and the pervasive demands that our individual needs and desires be met regardless of the consequences for others, testify to the fact that the modern and post-modern mood claims mastery, ownership and entitlement for the individual.

The reversal of ancient principles and practices brought about by the Gospel of Christ applies to any kind of self-aggrandisement by an ethnic, national, racial, social, religious, or denominational group at the expense of other such groups. God's suffering, transforming acceptance embraces all people. It is not only authoritarianism that became illegitimate, therefore, but also discrimination. That is why erstwhile pagans who accepted being accepted into God's fellowship became part of the people of God (Eph. 2).

With notable exceptions, the Old Testament presents us with a classical example of ethnic exclusiveness and hostile in-group-out-group attitudes. We have to face this fact if we want to retain our integrity as believers and Bible readers.

It is also indicative of the transformations effected by the biblical message over the centuries. According to Deuteronomy 7 and Exodus 23, the Canaanites had to be driven out of the country, because they were not part of the covenant people of God and did not keep the law of Yahweh.

Moreover, the law code of the priestly source provides many examples of how anything considered ritually impure had to be excluded from the people of God, if not exterminated. This code, found in Leviticus and Numbers, is exceptionally liberal with its application of the death sentence. According to the texts, these attitudes occasionally culminated in genocide (1 Sam. 15). Such examples were found in most cultures and religions throughout history.

In modern times, the urge towards self-absolutisation and exclusion has been democratised. It manifests itself in the pursuit of individual and collective self-interest regardless of the costs to others and to nature. It can also explode in wars aimed at gaining access to natural resources. With increasing population numbers, increasing material expectations and increasing scarcity of natural resources, this trend can only escalate.

Oppressive and discriminatory practices should not be justified by arguing that it was God who commanded the 'people of God' to practise them in biblical times. The divine legitimisation of human self-interest is extremely common in the history of humanity and the Israelite case is nothing extraordinary.

What matters is that ethnocentrism, like authoritarianism, was turned on its head within biblical history. According to Ephesians chapter 2, the dividing wall of the law (understood as a series of conditions of acceptance) was demolished and a new humanity was formed out of former enemies.

Wherever God's suffering acceptance of the unacceptable becomes the basis of human attitudes, actions and institutions, oppression, domination, exclusion, discrimination and marginalisation cannot survive. Conversely, wherever the self-aggrandisement of leaders and the exclusion of outsiders appear within the church of Christ, we must recognise them as what they are, namely, an aberration of the Christian faith and a denial of its very rationale.

Like the message itself on which it is based, it is a lesson that does not easily penetrate our instinctual preference for self-preservation and dominance, our insistence on conditions of acceptance and the exclusion (or elimination) of potential enemies, competitors and strangers. These attitudes must be exposed and overcome, rather than given out as a legitimate facet of the Christian faith.

The new rationale could change the world. Let us apply God's suffering transforming acceptance of the unacceptable to the most intractable socio-political problem we have today: the relation between Israelis and Arabs in Palestine. Neither Jews nor Christians are acceptable for committed Muslims. Yet they do exist. And so it would seem that God (*Allah*) does tolerate them.

If all three of these 'Abrahamic' faiths would participate in God's suffering, transforming acceptance of the unacceptable, what a difference that would make! In fact, accepting each other, suffering each other, Arabs would transform Israelis and Israelis would transform Arabs, and a new healthy symbiosis would become possible. There are countless other such cases in the world.

## The meaning of the cross of Christ

For the Jewish leaders, the condemnation and execution of Jesus and the failure of God to come to his rescue proved that God had rejected and condemned Jesus and his ministry as heretical beyond any reasonable doubt. For the Roman authorities, his execution was expedient in terms of the interests of the Empire. For these two groups, that was the end of the matter.

But for the followers of Jesus, the cross of Christ rather unexpectedly acquired a profound *theological* significance. Among them, the certainty arose that Jesus was not guilty in terms of the charges of heresy, presumptuousness and sedition laid against him. Rather, the condemnation and execution of Christ was the prototypical example of God’s suffering, transforming acceptance of the unacceptable.

God had exposed ‘himself’ to the misapprehension and waywardness of humankind in the suffering of ‘his’ messianic representative. The cross manifested the extent to which the redemptive intentionality of God would go in the direction of sacrificial love. This certainty seems to have been triggered and informed by the texts on the ‘suffering Servant’ found in Isaiah chapter 53.

It was not necessarily a new idea in terms of the Jewish tradition, therefore, but it assumed foundational significance for the emerging Christian faith. Whether this meaning could legitimately be ascribed to his crucifixion became the issue between Christians and the Jewish (and Roman) leaders.

It can be argued that the condemnation of Jesus by the Sanhedrin was legitimate in terms of the understanding of Jewish law prevalent at the time. According to Deuteronomy chapters 28 and 30, Yahweh’s blessing would rest on those who kept the law and Yahweh’s curse on those who transgressed it.

In post-exilic times, it was argued that those transgressing the law would not get away with it and those who had kept the law would not forfeit their reward, even if they died. Yahweh was a God of justice who would raise the dead to face judgment. And that would happen on the ‘Day of the Lord’, when the Messiah would come in glory to establish the Kingdom of God for all to see.

Obviously, that had not occurred as yet. So how could Jesus’ claim to divine authority possibly be legitimate? His seeming disregard for the Mosaic law, both in its Deuteronomic and its Priestly form, and his claim to divine authority as the ‘Son of Man’ or ‘Son of God’ evoked immediate and fierce rejection by the Jewish spiritual and political authorities. Nobody could claim to act as the messianic representative of God, while undermining the law and the ritual instituted by God ‘himself’!

The execution of Jesus by the Romans was equally legitimate in terms of Roman law at the time. The Gospels suggest that Pilate was an uncertain and rather unwilling victim of Jewish agitation. But apparently, the disciples of Jesus and his Galilean followers saw in him the messianic king expected by the Jews for many centuries.

Because of the inscription on the cross (the King of the Jews), there can be no doubt that he was crucified as such. Whoever claimed royal status without Rome’s authority was a danger to the stability of the Roman state. The punishment for insurrection was crucifixion. Royal pretensions had to be squashed in the bud.

Jesus was declared ‘sinless’ by his followers. Originally, this assertion was meant to refute the legitimacy of his condemnation by the Jewish and Roman authorities. According to them, Jesus’ interpretation of the God of Israel was valid. Although Jesus may have followed and

radicalised a particular strand within the Israelite-Jewish tradition, he was not a heretic. His claim to divine authority was not spurious but legitimate.

He was also not a revolutionary instigator, as assumed by the Roman authorities, but the 'Prince of Peace' envisaged in Isaiah chapters 9 and 11. The procession into Jerusalem was, after all, unarmed. But representatives of the Roman Empire did not bother about such subtleties.

So his followers were convinced that he was without guilt. What Jesus had proclaimed and enacted in the name of God was that Yahweh was not a God of retributive justice, as Deuteronomy seemed to have defined him, but a God of redeeming mercy. And if Jesus' interpretation and proclamation of the God of Israel was valid, Jesus must have acted with divine authority. So his claim to be the messianic representative of God was entirely plausible.

The 'sinlessness' of Jesus was then absolutised and applied to the 'risen Christ'. He became the prototype of the authentic human being, the legitimate and flawless representative of a powerful and benevolent God. And by faith, all believers have access to participation in this new kind of being human. They can 'put off' the 'flesh' (their own sinful lives) and 'put on' Christ (the new life in fellowship with God).

## The new meaning of sacrifice

We have to go a decisive step further. If Jesus was indeed God's messianic representative, why did God not prevent his execution with a mighty intervention? Answer: God exposed God's messianic representative to sinful humanity because God was willing to suffer the depravity of humankind. He was willing to forgive. One always 'gives away' what one 'forgives'. If you forsake your right to restitution or revenge, you suffer what the guilty person should have suffered. That was the core of the matter.

The New Testament authors acclaim with one voice that Christ had died prototypically 'for us', that is, for humankind as such in its estrangement from the creative and redemptive intentionality of God. It is remarkable that the blame for the death of Jesus was not simply laid on the Jewish and Roman authorities, but on all of us. All of us are sinners and enemies of a graceful God. In Christ, God's 'royal Son', that is, God's plenipotentiary and representative on earth, God had exposed himself to the depravity and enmity of *humankind*.

Just contemplate the scope of the new insight: Humans were no longer expected to sacrifice their firstborn sons to appease an irate Deity, but God sacrificed his 'only-born Son' (God 'himself' in God's representative) to a self-seeking, rebellious and hostile humanity. God staked God's own divine status to get reconciled with humankind. This view represented a momentous reversal not only of Jewish faith assumptions, but of a general trend in many other religions and world views as well.

## Entropy and Sacrifice

Modern scientific theory can help us to perform a quantum leap in our interpretation of the cross of Christ, a leap that is absolutely decisive for our concern about the economic and ecological future of humankind. There is a profound, but hardly ever contemplated correspondence between the cross of Christ and the law of entropy. It shows that the basic message of the Christian faith, spiritual as it may seem, is not out of character with what happens in the rest of reality.

Millions of seeds are produced and perish so that a few of them find the fertile ground needed for them to germinate. Humans devour large quantities of other life on a daily basis, otherwise they would not be able to exist. Life can only be sustained through the death of other life. This is also true in terms of entire species. The extinction of the dinosaurs brought mammals to prominence and made the ascendancy of the human species possible.

It is also true in physical terms. Life on earth depends on the fact that our star, the sun, is slowly burning up. When chemical substances combine to form more complex compounds, they forfeit their specific identities and characteristics. In cosmic terms, evolution happens within the context of the entropic process. Construction presupposes deconstruction elsewhere in the system.

Expressed in theological terms, God sacrifices parts of God's creation so that we can live. And we are called upon to participate in God's redemptive project by sacrificing parts of our lives, and ultimately our lives as such, so that other creatures may have the time, the space and the resources necessary to live and prosper. There is no way we can be with God without participating in the sacrifice that God perpetually offers to his creation.

At the social and spiritual levels of emergence, this sacrifice of God culminated in the cross of Christ. This is the level at which the Christian faith operates. It is precisely this participation in God's overarching redemptive project that brings about fulfilment and joy in human existence. Human authenticity is located in self-giving love. For Paul, suffering means participation in the death of Christ, which unlocks participation in the new life of Christ (Rom. 6:1-11; 2 Cor. 4:7-12).

If my contentions above are valid, what is the difference between Jesus and figures such as Mother Theresa or Mahatma Gandhi?

## Section III

### The elevated Christ

Christ is alive—in spite of his shameful death on the cross! Christ has been elevated to messianic authority. We are privileged to share in his new life in communion with God and participate in his redemptive project in the world. That is the jubilant proclamation of the Christian faith!

Note that Christ is alive precisely as the *crucified*—the one in whose fate God manifested God’s forgiveness, that is, God’s suffering, transforming acceptance of the unacceptable (1 Cor. 1:23, 2:2). His fate is not reversed, as Christians often assume, but confirmed. And that is decisive for us!

The risen Christ is the prototype of a sacrificial life. He lived and died on our behalf and we are allowed to participate in his life and death on behalf of others. That is the reassurance by which Christians live their lives in spite of their shortcomings and predicaments, in spite also of the vicissitudes and catastrophes of their life worlds.

### The ontological status of the risen Christ

But what precisely could the ‘resurrection of Christ’ and his elevation to messianic authority mean from an experiential point of view? In which sense does he ‘live’? Where precisely is Christ, if he is situated at the ‘right hand of God’? What is it precisely that constitutes his authority? Does he wield real power in the physical or political sense of the word? We are here confronted with the most formidable challenge an experiential-realist approach poses to the certainties of the Christian faith. Let us beware of jumping to quick solutions, but endure the agony presented by this challenge!

To begin with, we have to realise that the notion of the ‘resurrection of Christ from the dead’ posed insoluble questions from the very outset—and that both in terms of the Jewish and the Hellenistic thought of the time. But the problem has shifted considerably in modern times.

In contrast to modern thought, the possibility of a resurrection from the dead was not the core of the problem between the followers of Jesus and their Jewish opponents. Although not uncontroversial, the expectation that the dead would rise was by no means a strange idea in Judaism. ‘Why should it be thought incredible by any of you that God raises the dead?’ (Acts 26:8).

The question was, rather, whether and for what reason the Messiah had to die and rise from the dead—and that ahead of all the others! There was no precedent for this idea in Judaism. For Jewish thought, resurrection would happen to all of us so that we could face the last judgment. For apocalyptic thought, this would happen at the end of times, which was believed to be close at hand.

Obviously, the messianic representative of God could not have been part of sinful humanity, thus not subjected to the last judgment. On the contrary, Christians maintained, as

the authentic human being, he would represent God as the ultimate judge and as the king of the Kingdom of God (Matt. 25:3 ff; 28:18; Eph. 1:20-23).

So if he was the Messiah, why should he first have to die, rise, go to heaven and return to earth a second time? If he was a normal human being, why should Jesus rise ahead of all other human beings? If his ‘second coming’ would bring about the ‘Kingdom of God’ or the apocalyptic ‘age to come’, why did this not happen there and then? We can see why the Christian message of resurrection was difficult for Jews to accept.

It was no easier for Hellenistic audiences, but for other reasons. As 1 Corinthians 15 shows, it was the *bodily* resurrection of Jesus from the dead that did not make sense. That the immortal soul of the authentic human being would leave his mortal body behind and return to his eternal origin in the realm of the divine spirit posed no difficulties for Platonic thought.

But his body? Can it not be shown that dead bodies rot in the grave? Was the material body not the seat of desire, temptation and waywardness? Was it not subject to vulnerability, deterioration and decay? Was it not feeble and transitory? If it was the spirit that mattered, why should the body be rescued in the first place?

Our secular contemporaries too must have the greatest difficulties with a literal interpretation of any notion of ‘bodily resurrection from the dead’. Death demonstrably entails the dissolution of the organism and the scattering and redeployment of its myriad components elsewhere in its environment. With its bodily infrastructure gone, the particular spirit of a person has vanished as well, unless it had been transferred to another bodily infrastructure through some form of communication. If Jesus was a human being, this also had to apply to him.

Scientifically informed people can perhaps see in Jesus an exceptional religious leader and moral example that lived far back in history and continues to inspire countless people. But that is as far as it goes. This stance is very common among our secular contemporaries.

### Untenable interpretations

Taking our clues from current scientific insight, what could the assertion that Jesus rose from the dead actually mean? Let us mention a few possibilities.<sup>53</sup>

1. It could not have been the resuscitation of a corpse after two nights in the grave, because decay would have set in by then. Moreover, if indeed that had happened, Jesus would have had to die again. This again would defeat the very rationale of the Christian proclamation of his resurrection, namely that the new life of the ‘risen Christ’ is forever and universally present and accessible to all believers.

2. If the risen Christ had been a new quasi-biological creation, this would have required the existence of a completely new and different cosmological infrastructure that was not based on entropy and evolutionary processes and that nevertheless allowed continuity with the world we know. There is no indication that such a reality exists or could exist.<sup>54</sup>

Moreover, if the assumed new reality were in continuity with the world we know, it could not transcend the constraints of time, space and energy, which the Christian faith claims for the risen Christ. Conversely, if it were not in continuity with the world of which we are a part, it

<sup>53</sup> Suggested reading: Ted Peters, Robert John Russel, and Michael Welker (eds), *Resurrection: Theological and Scientific Assessment*. Grand Rapids: Eerdmans, 2002.

<sup>54</sup> For an example of this argument see Robert John Russell, *Cosmology from Alpha to Omega: The Creative Mutual Interaction of Theology and Science*. Minneapolis: Fortress Press, 2008, pp. 298-322.

would preclude our participation in the new life of Christ here and now. So I believe this to be a non-starter.

3. The 'risen Christ' could not have been the immortal soul of Jesus, released from his body, as Platonism would have argued, because the theory of emergence says that the realm of the spirit presupposes the lower level infrastructure of biological, chemical and physical reality. Besides that, this option was rejected by Christian theologians during New Testament times and finally by the patristic fathers and ecumenical councils.

4. Again, if the risen Christ were God, the transcendent Source and Destiny of reality, in human form, rather than the authentic human being, we would have to assume that God now had acquired a mortal body similar to our own, yet remained beyond all constraints of time, space and energy. This is not only a contradiction in terms, but the idea is also found nowhere in the biblical Scriptures.

The new life of Christ would also not be accessible to our participation, as Christians claim it to be, because humans cannot be divine. There are, of course, Christians and denominations for whom salvation means becoming divine. This faith is based on Platonic assumptions, but is it credible? Humans can only become authentically human by participating in the authenticity of Christ.

5. Finally, it has become impossible to assume that Christ was taken bodily into 'heaven above' as a spatial realm elsewhere in the universe, because as far as we know, there is no such realm. If there were, it would be totally out of our reach, thus irrelevant for us. One can also not assume that he was taken out of time, so that he could live forever, but not out of space, so that he could be present wherever. So if Christ rose bodily, where might such a body be and in which way could we still relate with him?

## The character of the sources

The problem is compounded by the nature of the New Testament sources. These narratives were written decades after the event. By that time, a number of traditions had evolved that had moved so far apart from each other that they can no longer be harmonised. There are no independent sources that could augment, falsify, or affirm any of them.

As happens in such cases, a lot of legendary overgrowth developed that should not be confused with historical records. As we have seen in chapter 5, ancient preachers, authors and believers used all linguistic tools at their disposal for this witness—report, poetry, fiction, myth, legend, parable and metaphor.

Ancient authors were also very 'creative' in their stories, notably John, showing that they had a theological, rather than a historical agenda. They did not subject their work to the Enlightenment criteria of empirical evidence and historical precision. Moreover, it was assumed that the risen Christ spoke through inspired believers, so this was not deemed fraudulent but genuine. It was the *message* that mattered. And the message was: Christ is alive! He sends us out into the world to proclaim and enact God's creative and redemptive intentions in the authority of God as he himself had done when he walked on earth.

It is not as if we knew nothing at all about the historical Jesus. We can be reasonably certain that he lived, proclaimed the Kingdom of God, gathered disciples, marched into Jerusalem, was arrested, condemned as a heretic, and crucified as the 'King of the Jews', thus as an insurgent against the Roman Empire. We also know that the message of his elevation to the status of the messianic representative of God spread rapidly.

But that is about as far as it goes. Here are some of the historical uncertainties and factual incongruities: Did all this happen in Galilee or in Jerusalem? Did the risen Christ appear to Peter first (1 Cor. 15:5), or to a number of women (Luke 23:55, 24:10), or to three women (Mark 16:1), or to two women (Matt. 28:1), or to one woman (John 20:1), or to no women at all (1 Cor. 15:5 ff)?

Who precisely were these women? Did they run to the disciples with joy (Matt. 28:8), or were they too afraid to speak (Mark 16:8)? What was the nature of these ‘appearances’—a material body, a vision, an audition, a sudden and overwhelming spiritual certainty, or perhaps a resolute and emphatic, yet metaphorical, way of saying something about the kind of God Christians believe in on the basis of the ministry of the earthly Jesus?

How can one make sense of a body that can eat and be touched, yet appear in a room with locked doors (John 20:19-29)? Why is the risen Christ not immediately recognised by his followers in many of the narratives, although the marks of his suffering are still on him? What is the literary genre of the various narratives about the ‘empty grave’? What does it mean that Christ was ‘taken to heaven in a cloud’?

What is the nature of the claim that the ‘Scriptures’ were fulfilled in these occurrences? Which Old Testament Scriptures were *actually* fulfilled by what the New Testament tells us about the resurrection of Jesus? And if all this is metaphorical language, what precisely is the referent to which the metaphors refer?

While the *theological* intention of the narratives is entirely clear, there is no way *historical* certainty can be reached on any of these questions. Endless speculation has only made the situation worse. If we want to make sense of these narratives at all, we have no choice but to try and dig into the intended *meaning* that the message of the resurrection of Christ wanted to convey.

What we have in the New Testament is a conglomeration of traditions with a variety of origins and trajectories, bound together by a *central motif*: Christ died for us; Christ lives for us; Christ has been elevated by God to the status of God’s universal representative; Christ is present among us in his Spirit; we are invited to participate in his new life.

It is important to realise that this messy nature of the New Testament witness is its *strength*, not its weakness. Irreconcilable differences between them make it impossible to take any of these statements at face value. They are all embedded in, and determined by, world view assumptions, and world view assumptions are in constant flux.

This insight again liberates us to be creative in our own appropriation of the story. Has it ever occurred to you that there are thousands of depictions of Christ in paintings, sculptures and films that reflect the features of different race groups, cultures, personal characteristics and situational moods?

It is impossible to tell which one would come closest to the historical Jesus. It is also besides the point to ask such a question, because the ‘risen Christ’ stands for a new humanity, which is meant to be appropriated by all human beings throughout human history.

This is precisely the way believers make the risen Christ their own. It is clear that the biblical narratives represent the stammering attempts of believers to witness to the amazing presence and power of the risen Christ in their midst. They rejoiced in the new relationship that Christ had opened up with God.

## The elevation of Christ to universal authority

The historically uncertain character of the sources and their obvious disregard of historical precision help us to concentrate on the *intended meaning*, rather than on the precision of historical facts. If historical certainty cannot be reached and was never intended by the authors of the Scriptures, what then was the thrust of the message? There are at least three aspects.

1. These authors were gifted with a new interpretation of resurrection: God had identified himself with Jesus' proclamation and enactment of God's unconditional transformative acceptance of the unacceptable. The 'resurrection of Jesus' was a *divine vindication of the claim of Jesus to divine authority*. In the final analysis, it was not a question of *ontology*, therefore, but of *validity*.

As mentioned before, the texts on the 'Suffering Servant' in Isaiah chapter 53 helped the followers of Jesus to come to terms with the apparent failure of Jesus' mission. God had used the death of Jesus to manifest God's own sacrificial love and declared this fact to be universally valid by elevating the *crucified* Jesus, the authentic human being, to the position of universal ruler. In spite of what the Jewish and Roman leaders believed and decreed, they asserted that Jesus represented and manifested God's creative and redemptive intentionality.

There is no doubt in my mind that it is the proclamation of God's affirmation of the validity of the redemptive ministry of Jesus as a reflection of God's intentionality that made the Christ event the unique criterion of truth for all Christians, nothing more and nothing less. Apart from his (untenable) apocalyptic frame of reference, therefore, Paul was right when he claimed that, without this message, the Christian faith would lose its foundation (1 Cor. 15:12 ff). And he left no doubt that it was the *crucified* Christ who had been elevated by God to universal significance (1 Cor. 2:2).

Taken in its historical context, it is hardly possible to fathom the audacity of this proclamation. The real craziness was not the message that a corpse had come to life again or that a deceased person had been granted a new and different lease of life. The real craziness was much more profound. A bunch of unschooled, disillusioned, intimidated and disoriented followers of Jesus, who had fled in horror on that fateful day, suddenly went public shamelessly and fearlessly with a truly incredible and seemingly ridiculous message.

Jesus of Nazareth had been an itinerant Jewish rabbi, hailing from a remote Roman province, rather than from Jerusalem, the designated capital of the world in Jewish eyes. He had gathered a bunch of simple people, including outcasts, notorious sinners and women around himself. He was paraded on a donkey by an excited and seemingly deluded crowd of Galilean peasants and fishermen into Jerusalem.

His followers had not dared to resist the temple guard with the force of arms. He was betrayed by one of his followers, denied by another, misunderstood and abandoned by the rest. He was condemned as a heretic, impostor and blasphemer by the leaders of his religious community. He was ridiculed, tortured and executed as an insurgent by the authorities of the mighty Roman Empire.

What a pathetic figure! By any human standards, this man was a failed human being. And it is precisely this man, hanging on the cross, who was proclaimed the long-expected messianic ruler of the world, the royal representative of God, the firstborn of creation, the judge of the last judgment, the *Kurios* of the cosmos, the Lord over all ideological and political powers that determined human existence at the time and ever after. Who could possibly accede to this

claim! As Paul says in 1 Corinthians 1:20 ff, it was a crazy and scandalous idea. But that is exactly the point: This is how God acted and acts!

2. What happened in Jesus acquired *universal validity and accessibility*. The interpretation of the cross of Christ as an act of God on behalf of humankind marked a decisive shift in the assessment of the ministry of Jesus of Nazareth. Authentic humanity, which had manifested itself in this *particular* human being, in a particular geographical space, during a particular phase in history, within a particular religious and cultural tradition, with its limited range of influence, had now become valid, present and accessible for *all humans* of all times, places and cultures.

To adapt a metaphor used variably in the New Testament, the ‘seed’ that had fallen into the ground had grown into a plant that yielded abundant fruit (John 12:24). Out of the ashes of Jesus of Nazareth, experienced by his disciples as the epitome of the new human being, had risen a new, authentic, universally accessible kind of human existence, in which all of humanity was invited to participate. It is when ‘elevated’, we are told, that Christ would draw all people to himself (John 12:32). All those who identified with Christ in faith became participants of the new life of Christ and got involved in God’s creative and redemptive project as Jesus had been before.

Expressed in terms of the theory of emergence, the spirit of Jesus, which had rested upon the impersonal infrastructure of his own body before his death, had now become the Spirit of Christ that settled upon the bodies of the members of the community of believers, which Paul calls the ‘Body of Christ’ (1 Cor. 12). It was this community that provided the biological infrastructure and the communal supra-structure of the Spirit of Christ.

In experiential terms, the ontological reality of the ‘risen Christ’ is a phenomenon located at the level of the ‘spirit’, that is, at the level of structured and oriented consciousness that we discussed in chapter 8. The differentiation between the risen Christ as a bodily entity and the Holy Spirit, found in later theology, was a consequence of the three-story world view of antiquity (heaven above, earth, underworld) that has since become untenable.

In this world view, heaven and earth were two distinct spatial spheres, and body and spirit were two different ontological realities. If Christ had ‘gone to heaven’ to ‘sit at the right hand of God’, his body could no longer dwell on earth, but his spirit could be present among us. A ‘spiritual’ entity was not constrained, it was believed, by time and space.<sup>55</sup>

However, countless texts show that the distinction between heaven and earth is a metaphor meant to contrast the authentic mode of being, where God’s will is done, with the inauthentic human mode of being that must be overcome. ‘Your will be done on earth as it is in heaven!’ Such metaphors should not be reified. Heaven is not meant to be an alternative space in ontological terms. God is not where heaven is, but heaven is where God is. Heaven is reality as it ought to be according to the vision of its Creator.

<sup>55</sup> This assumption marked the difference between Luther and Calvin in their approach to Christ’s ‘real presence’ in the Last Supper. See Klaus Nürnberger, *Martin Luther’s Message for Us Today: A Perspective from the South*. Pietermaritzburg: Cluster Publications, 2005, pp. 222-8.

The Synoptic Gospels break through the three-level world view in many ways. Christ would be with them where two or three gathered in his name (Matt. 18:20), where they showed mercy to those in need (Matt. 25:31 ff) and where they would go out into the world to proclaim the message (Matt. 28:16 ff). The new life of Christ in which we are to participate is expressed with the concept of discipleship. The disciples would do exactly what Jesus did (compare Matt. 9:35 ff with 10:1 ff) and face the same fate (Matt. 10:16, 24 f).

Paul says that there is a new way of being human—no longer the ‘first Adam’, but the ‘second Adam’, which is Christ (Rom. 5:12 ff). Death and resurrection mark the transition between the two. This is true for Christ: We once knew him according to the flesh, but no longer; he is a new creation (2 Cor. 5:16-18). This transition is anticipated by believers when they identify with the death and resurrection of Christ in their baptism (Rom. 6).

Believers are no longer ‘in the flesh’, but ‘in the Spirit’, or ‘in Christ’. At least, they no longer conduct their lives ‘according to the flesh’, but ‘according to the Spirit’, or ‘according to Christ’. They become members of the Body of Christ, the fellowship of believers (1 Cor. 6:15; 12:12 ff), who is ‘the Christ’ (1 Cor. 12:12). ‘The Lord is the Spirit’, and through the Spirit, believers are transformed into his image (2 Cor. 3:17 f), who is the image of God (2 Cor. 4:4).

The new life of Christ is a life in reconciled fellowship with God, in loving service of others (1 Cor. 13), the building of the community of believers (1 Cor. 14:6-12), and the witness to the world (1 Cor. 14:24). ‘We are daily given into death with Jesus, so that the life of Jesus may be made visible in our mortal flesh. So death is at work in us, but new life in you’ (2 Cor. 4:11).

To be ‘in Christ’ means to be ‘in the Spirit’, that is, in human authenticity, as opposed to being ‘in the flesh’, that is, in human inauthenticity. What happened in Jesus is prototypical for what happens in us: The new life of Christ overcomes the old life of Adam. The risen Christ is the ideal type of the new human being in whose life we are allowed to participate (Rom. 8:12-17).

The metaphorical character of the distinction between heaven and earth becomes particularly clear in the Deutero-Pauline letters (Ephesians and Colossians). They argue that Christ has been raised above all cosmic powers as the head of the ‘body’ (the church), which is the *pleroma* (cosmic fullness) that fulfils all in all (Eph. 1:20-23).

That means that the believers have been ‘raised with Christ’ and ‘seated with Christ’ in the ‘heavenly places’ (Eph. 2:5-6; Col. 3:1 ff). Christ is the one new humanity who gathers up and unites the hostile sections of humanity, Jews and Gentiles (Eph. 2:15). They form the household of God, a holy temple ‘in Christ’, who is the ‘cornerstone’ of the whole structure (Eph. 2:20 ff).

Believers are encouraged, therefore, to live their lives ‘in Christ’ and build up their community ‘in Christ’ (Col. 2:6). Christ is the *pleroma* (cosmic fullness) in whom they have their ‘fullness’ (Col. 2:9). Again, there is a very close association between the risen Christ and the community transformed and empowered by the Spirit of Christ.

The Gospel of John moves in the same direction. A remarkable formulation repeatedly occurring in this Gospel says that Jesus would be ‘lifted up’. What does that mean—raised to hang on the cross? Or raised from the dead into a new kind of ‘biological’ life? Or raised to heavenly glory? Or raised to eternal and universal significance as the prototype of the authentic human being? Or raised into the ‘Spirit of truth’?

While John certainly alludes to the Jewish sacrificial tradition, according to which Christ ‘died for us’, it is also clear that the elevated Christ signifies the new way of being human in intimate fellowship with God and defined as self-giving love to others (John 14:15-24; 1 John 4:7-16). All who believe in him (identify with him) are reborn in the Spirit (John 3:3-10) and empowered to become sons and daughters of God (John 1:12).

He would be ‘lifted up so that all who believe in him would have eternal life’ (John 3:14 f). When lifted up, he would ‘draw all people to himself’ (John 12:32). If Christ did not go, the Spirit would not come (John 16:7). The Spirit would have nothing to say of his own, but of

what belongs to Christ (John 16:12-15), just as Christ had nothing to say and do, but of what belongs to the Father (John 5:19, 30).

Leaving this world and going to the Father, he would not leave his disciples ‘orphaned’, but come to them (John 14:18). In sending the Spirit, he and the Father would be among them and make their home among them. There would be profound immediacy in the relationship between God, Jesus and the believers (John 14:18-24). In all these cases, it is hard to distinguish the risen Christ from the Spirit.

3. In the power of the Spirit, the former disciples of Jesus went out into the world to proclaim the authority of Christ as the messianic representative of God and the validity of his message about God’s creative and redemptive intentionality. The message of the resurrection of Jesus from the dead found surprising and increasing acceptance. The inherent power of this message shone through its seemingly ridiculous form.

Why that? It was the most powerful assertion of the validity of the message of *God’s suffering, transforming acceptance of the unacceptable* that one can think of. It appealed immediately to the enslaved, marginalised, despised, poor, sick and outcast. It appealed also to those whose death was imminent, removing all fear of what would happen beyond the grave.

The former disciples proclaimed the message that God had identified with Jesus’ interpretation, proclamation and enactment of the God of Israel as a God of creative, redemptive and sacrificial love. God’s intentionality had been defined by what had happened in the Christ event. In God’s ‘Son’ (that is, God’s messianic representative on earth), God had exposed himself to the vulnerability, depravity and enmity of humanity—and that to the extreme of his death on the cross.

And if that was true for humans, it had to be true for the cosmos, that is, for society, the earth and God’s creation as a whole. That is why the New Testament authors trace its trajectory right back to the beginnings of humankind, throughout subsequent history and up to the eschatological ‘end of time’. Let us look at that in some detail.

## **Cosmic projections of divine validity**

There are statements about Christ in the New Testament that, taken literally, are even less comprehensible than those of his resurrection from the dead. These are statements about the so-called ‘cosmic Christ’. In which sense could Jesus of Nazareth, as a historical human being, be present throughout time from beginning to end and throughout cosmic space? In which sense could he be the principle or ‘essence’ of reality, as New Testament authors claim?

There are four biblical projections of reality as it ought to be in the Bible—the mythological ‘beginning’ of time that was ‘very good’, the eschatological ‘end’ of time that will be very good, an alternative ‘heavenly’ space that is very good, and an ‘essence’ of reality that is very good, but hidden.

Science cannot confirm the veracity of any of these statements because it does not deal with what ought to be. In fact, big bang cosmology precludes an ideal

situation at the beginning of time. The law of entropy precludes an ideal situation at the end of time. The modern concept of cosmic space precludes an alternative reality in a ‘heaven above’. And the theory of emergence precludes an ideal ‘essence’ of reality hidden beneath its appearances.

So what could the message be that these statements wanted to convey in experiential terms? The concept of God as the transcendent Destiny of reality implies a divine vision of *what ought to be*. In all four cases, the point is God’s creative and redemptive intentionality, proclaimed in the face of an inauthentic reality. In spite of all indications to the contrary, the transcendent Source and Destiny of reality is benevolent. That is the message!

If the new life of Christ represented the ultimate intentionality of God, this intentionality had to underlie the whole of reality in terms of time, space, energy and quality. It is the *person of God* who manifested God’s intentionality in the person of this human being as creative and redemptive benevolence. This is what the ‘cosmic Christ’ refers to.

In terms of time, Christ was identified with God’s creative act at *the beginning* of time—whether in terms of the creative decree of God (Gen. 1, cf John 1:1-18; Phil. 2:6 f), or the creative wisdom of God (Sirach 1; Wisdom of Solomon 7; cf John 1:1-18; Col. 1:1 ff, 2:3).

He was also identified with God’s envisaged transformation of reality at *the end* of time—whether as the judge of the last judgment, the king of God’s coming kingdom or the principle of the new creation (Rev. 21-22).

In terms of space, he was identified with God’s superior ‘position’, being seated ‘at the right hand of God’. This was a messianic metaphor for *divine authority and power* (Eph. 1:20 ff; Matt. 28:18; Mark 16:19; Acts 7:55).

He was similarly identified with the *essence* of reality, that is, with what *ought to be*—which was currently obscured by what ought not to be (Col. 1:15-17, 3:4; Eph. 1:9, 3:5, 10). As such, he was the ‘new human being’ (Eph. 1:10, 2:13 ff), in opposition to the ‘old Adam’ (Rom. 5:12-21). And we are supposed to move out of the one into the other (Rom. 6).

New Testament authors even go so far as to give him the title of *Kurios* (Lord), which is the Greek rendering of the Hebrew word *Adonaj* in the Septuagint (the Greek translation of the Old Testament), which again stands there for *Yahweh*, the God of Israel and the Creator of the universe.

The development of the notion of the ‘cosmic Christ’ clearly demonstrates, therefore, what the New Testament believers wanted to communicate. They affirmed the self-identification of God’s intentionality with the proclamation and enactment of Jesus by attributing the ‘characteristics’ and ‘functions’ of God to the ‘risen Christ’.

In other words, by what happened in Christ, the God of Israel was defined as a God of suffering, liberating, transforming and empowering acceptance of the unacceptable. That is the core of the matter.

Although scientists may find it difficult to enter into the metaphorical language of an ancient pre-scientific discourse, once they do so, they will find nothing that contradicts scientific insight. But they could also find a potent source of meaning, a definition of acceptability and an allocation of legitimate authority in these ancient formulations that would give a new direction to their lives and their work.

## What do we lose, or gain, with this interpretation?

Christian faith is a living relationship with Jesus Christ, our ‘personal Saviour’. For this to be possible, our notion of Christ must be that of a *person* with whom we can relate in a personal way. Does my experiential interpretation destroy this personal relationship?

No, it does not! On the contrary, our relationship with Christ is infinitely enriched. Just imagine being transported back in time and space to the Jewish itinerant rabbi moving through the Galilean countryside with his small group of disciples and preaching to peasants, fishermen, outcasts and people with incurable diseases some two millennia ago.

Living in a mega-city at the beginning of the twenty-first century, would we immediately feel at home there—in the ancient Aramaic language, the ancient Jewish world of rituals and observances, the way to dress, eat and travel, the primitive economy, the political conflicts of the day?

Conversely, would Jesus of Nazareth as a historical human being have felt comfortable in a supermarket or a disco? Would he know what to do with a cell phone or a laptop? Could he make sense of the formulae of subatomic physics or cosmic space viewed through a telescope? Would he even want to enter into the debates of contemporary theologians about the Trinity?

Thank God that Christ has been lifted out of the constraints of a particular time, space, culture, language and world view. He manifests himself in an infinite variety of human beings and communities. As mentioned before, the variety of his manifestations is revealed in countless sculptures and paintings, simple hymns and glorious cantatas, popular tracts and scholarly treatises, liturgies and sermons.

He determines the lives of countless people in the most diverse circumstances. I encountered the living Christ in a tiny congregation in Muslim Kuala Lumpur, in the misery of Brazilian *favelas*, in the seriousness of German professors of theology, and in the elderly woman who stomped through a dusty African village with a drum, singing choruses, with a trail of dancing and singing children behind her.

Every human being can be reached by his transforming message; every human being can gain access to his new life; every human being can have an intimate personal relationship with him that transcends by far even that of his first disciples before his death. What immense riches!

What is more—in all these cases, the struggle between ‘flesh’ and ‘Spirit’ is enacted, lives are transformed, communities are built, and people are motivated to tackle the injustices and imbalances of their social and natural environments.

Nothing and nobody needs to be perfect before entering into the fellowship of God. In Christ, God accepts and suffers the unacceptable, transforms them from within, and invites them to participate in his creative and redemptive project.

‘Unless a grain of wheat falls into the earth and dies, it remains just a single grain; but if it dies, it brings much fruit . . . When I am lifted up from the earth, I will draw all people to myself!’ (John 12:27-32). This must certainly be one of the most potent descriptions of the resurrection of Christ found in the New Testament.

Truly speaking, it is when we take our ‘personal Saviour’ too personally, that is, too exclusively as *our* Saviour, he becomes too familiar, too close to us, too much like a teddy bear placed in the arms of a child for comfort and companionship. The risen Christ is simply much more and much greater than what we normally imagine him to be. And that leads us directly to the next topic.

Does the claim that God has raised the crucified Jesus to the status and authority of God’s messianic representative lead to Christian arrogance, exclusiveness and intolerance?

Or does it perhaps lead to the glorification of despondency, fatalism, ignorance, inefficiency, disease and decay among the poorest of the poor?

## Section IV

### The Spirit of Christ in the Body of Christ

Christ was deemed prototypical and constitutive for authentic human existence because he shared and manifested the creative authority and redemptive intentionality of God. In the Old Testament, the combination of divine presence, creative authority and benevolent intentionality is often expressed with the metaphor of the divine Spirit. We should not be surprised, therefore, that in the New Testament, Christ is pervasively associated with God’s Spirit.

In their narratives of the ‘virgin birth’, Matthew and Luke attribute the messianic nature of Jesus to the Holy Spirit. All three Synoptic Gospels attribute his messianic authority to the gift of the Holy Spirit at his baptism.

For Paul, the risen Christ *is* the Spirit, which is, at the same time, the new humanity in whose image we are to be transformed (2 Cor. 3:17 f). It is in the Spirit that he has been installed as ‘Son of God’, thus God’s representative (Rom. 1:3-4). The new life of the risen Christ is then identified with the life of the believers in as far as it was a life ‘in Christ’ or ‘in the Spirit’.

The implication is that all those who are led by the Spirit of God are ‘children of God’ and ‘joint heirs with Christ’ (Rom. 8:11-17), that the risen Christ is the ‘first fruits’ of the resurrection to be followed by all the others (1 Cor. 15:20-23) and the ‘firstborn of many brothers’ (Rom. 8:29). Similar to Paul’s view in Romans 1:3-4, 1 Peter 3:18 says that ‘he was put to death in the flesh, but made alive in the spirit’.

According to John’s Gospel, Christ returns in the Spirit to his disciples after having left them when he was ‘raised from the earth’ (John 14:18-23). John applies the metaphor of a new birth in the Spirit to all believers (John 1:12-13; 3:1-10), thereby correcting a quasi-biological misunderstanding of the legends of the virgin birth.

There can be no question, therefore, that for the New Testament the ‘risen Christ’ is a spiritual entity, in whose new life we are meant to participate. It is highly significant that the New Testament ascribed whatever was said about Jesus of

Nazareth or the risen Christ to those who came to participate in the new life of Christ in communion with God through faith.

Believers were ‘born of God’ like Jesus (John 1:12; Gal. 3:25-4:7); they were called to proclaim and enact the same message (compare Matt. 9:35 with Matt. 10:7 f); they would encounter the same resistance; they would suffer the same fate of being cast out, persecuted, imprisoned and condemned (Matt. 10:16-25; John 15:18-21).

They would die with Christ to be raised with him and enthroned with him ‘in the heavenly places’ (Eph. 2:4-6; cf Rom. 6:3-11); they were to act as judges of the last judgment (1 Cor. 6:2); they would carry the death of Christ in their bodies, so that the new life of Christ would also manifest itself in their bodies (2 Cor. 4:10-12; Rom. 6).

The Spirit of Christ permeated, liberated, transformed and empowered the ‘Body of Christ’, the community of believers (1 Cor. 12). With their concrete bodies, they were to be the ‘members’ that constituted the ongoing bodily manifestation of the risen Christ on earth (1 Cor. 6:13-17; Eph. 2:14 ff, 4:4), or the ‘temple’ of God (Eph. 2:15-22).

For the Deutero-Pauline letters (Ephesians and Colossians), heaven and earth were metaphors for the difference between the old sinful life and the new life in Christ so that believers could be seen as already being enthroned with Christ in heaven (Eph. 2:1-10; Col. 3:1-5).

In John, they were the ‘branches’ of the ‘vine’ that was Christ (John 15:1-11). God identified with Christ and Christ identified with those who believed in him. Conversely, believers identify with the God of creative and redeeming love that manifested itself in the ministry of Jesus (John 15:9-11; 1 John 4:9-16).

## The ‘Holy’ Spirit

All this shows that there is no *ontological* difference between Christ, the authentic human being, and other human beings. The difference lies in the new relationship between God and Christ in which we are invited to participate, thus in the superior *quality* of the new life in Christ.

It is a *particular* spirit that constitutes the particular character of both Jesus and those that believe in him. Faith in the Holy Spirit is another expression of faith in Jesus, the messianic representative of God. In fact, as Paul’s alternating usage of the concepts ‘in Christ’ and ‘in the Spirit’ shows, it is the same thing.

These observations neatly link up with my contentions concerning the nature of the ‘spirit’ in chapters 7 and 8. The concept of the ‘Spirit’ of God that manifested itself in the Christ event and continues to do so in the ‘Body of Christ’ is an example of structured and oriented individual and communal consciousness.

In scientific terms, it is based on synaptic networks in our brains formed through information of various derivations. The following observations clearly point in this direction.

- (a) Faith in Christ is based on a *narrative* that is deemed to have happened in human history (Luke 2:1 ff; 1 John 1:1 ff). It travels through time and space in the form of a *tradition*. It does not have the character of an eternal truth or a law of nature that can be accessed by anybody with a sober mind.

- (b) This message reaches us through *human communication*, that is, the proclamation of the Gospel. It becomes operational only when heard and accepted in faith (Rom. 10:14-17). It has to be retold again and again for faith to survive and flourish.
- (c) The message is expressed in terms of a *particular frame of reference*, focusing on the typically Jewish concepts of divine-human relationships, that is, divine authority, human sin, divine judgment and a redeemed creation.
- (d) It must be distinguished from other such phenomena. It can be corrupted by false prophets, messiahs and teachings (1 John 4:1 ff). Its particular gift can easily be lost, and believers must do their best to retain it. Likewise, its demand can easily be ignored or transgressed.
- (e) According to Paul and John, being ‘in the Spirit’ is the same as ‘being in Christ’, which is the same as ‘being in God’, which is defined as being in God’s love. Believers must ‘remain in’ Christ; Christ must ‘remain in’ the believers, just as Christ remains ‘in God’ and God remains ‘in Christ’.

In short, Christ and the believers share the creative and redemptive intentionality of God. This intentionality is clearly defined. Being in the Spirit is identical with remaining in the truth, which again is identical with remaining in the power of divine love. It refers to God’s creative and redemptive project in which we are invited to participate.

## What about Jesus as a concrete individual?

But did Jesus of Nazareth as a concrete human being, who had walked on our earth, disappear from the scene for good, while it is only his Spirit that continues to live among his followers? The first question is, why should we say *only*? Let us begin by praising God that his Spirit *does* continue to live among his followers!

Let us then concede that this is the way that we *can* experience his presence, and *do* experience his presence, and no other. It is also the only way that we can participate in his new life, which is what really matters! So this is the way God wants him to be present among us. He could not do so if he were still the historical and biological creature that he was before his death and then removed to some inaccessible alternative space after his resurrection.

But did Jesus not go to ‘heaven’? Sure, but God is not where heaven is; heaven is where God is. Heaven is reality as it ought to be. Christ can only be ‘at the right hand of God’ as God’s representative and the prime manifestation of God’s benevolence if he shares God’s presence *for us* at all times and places.

Christ is present where we gather in his name (Matt. 18:20), where we go into the world to proclaim the Gospel (Matt. 28:20), where we show loving concern for our fellow human beings (Matt. 25:31-46), where we live ‘in Christ’ and ‘according to the Spirit’ rather than the ‘flesh’ (Rom. 8:1-10); where we keep his commandment to love each other and where God and Christ make their home among us (John 14:15-23), where we abide in him and bring much fruit like the branches of a vine (John 15:1-14).

As mentioned above, the differentiation between the risen Christ and the Spirit must be attributed to the ancient world view that distinguished between a ‘heaven above’, where Christ had gone, and ‘earth’, where we encounter him ‘only’ in the Spirit. Taken literally, such a differentiation is no longer tenable. But there is an existential core to this world view, namely the discrepancy between what ought to become (heaven) and what has become (earth).

Like everything else in this world, the Christ we experience in the Spirit is problematic, incomplete and provisional. Our vision of what *ought* to become seems to call for a time when what *ought* to become *will* become. This expectation is expressed in the metaphor of Christ’s return to earth (or our elevation to heaven), where we shall see him ‘from face to face’ (1 Cor. 13:12).

## The ‘two natures’ of the Spirit

So the ‘Spirit’ that Christians refer to is an example of structured and oriented consciousness, not something uncanny or otherworldly. But there is a qualitative difference between various kinds of spirit. The ‘Holy Spirit’ is not in conflict with the basic spiritual potential that characterises all humans, but it may certainly be in conflict with problematic spiritual phenomena, or ‘unholy spirits’.

Expressed in experiential, rather than ontological terms, the ‘Holy Spirit’ is a spirit that manifests God’s vision of comprehensive optimal well-being; that expresses God’s loving concern for any deficiency in well-being in any dimension of life, and that calls us into participation in his creative and redemptive project for reality as a whole.

Because the Spirit of Christ, reflecting the intentionality of God, manifests himself in the human spirit, the classical doctrine of the ‘two natures of Christ’ must also be applied to the Spirit. According to the Council of Chalcedon, the divine and the human ‘natures’ of Christ (God’s intentionality and its human manifestation) must not be *confused* with each other, but neither must they be *separated* from each other.

It is not possible, therefore, to separate the divine and the human aspects of the Holy Spirit and contrast them with each other. The divine Spirit is operative *through* the human spirit. And the divine Spirit is real, effective and accessible for us only in the form of a transformed human spirit. Whether deemed divine or human, we must distinguish between the ‘*Holy Spirit*’ and an ‘*unholy spirit*’, a spirit of self-centredness, avarice and arrogance, rather than between the *divine* and a *human* spirit.

Does my interpretation in fact deny that the Holy Spirit is God in person, or one of the three divine persons in the Trinity? Does it say, rather, that the Holy Spirit is nothing but a human spiritual orientation among others?

## Secion V

### The Trinity

#### The scandal and the mystery

We talked about God, the transcendent Source and Destiny of reality. We talked about the disclosure of God's benevolent intentionality in the Christ event. We talked about the Spirit of Christ present in the community of believers. How do these three aspects relate to each other? Do Christians believe in three Gods, rather than one?

Primitive assaults on the Christian faith, emanating from such quarters as Islam and Jehovah's Witnesses, accuse us of tritheism (assumption of three Gods), rather than monotheism (faith in one God). They ridicule us for not understanding that  $1 + 1 + 1 = 3$  rather than 1. Atheists such as Richard Dawkins dismiss the doctrine of the Trinity as pure nonsense.

Countless intellectual crutches have been offered, none of which really explain the underlying intention: the relation between the height, breadth and length of an object; the relation between the same man as a husband, a father and an uncle; the relation between thesis, antithesis and synthesis; the reflection of an assumed divine community in an authentic human community; the necessity of putting a female aspect into our concept of God, and many others.

In many cases, arguments raised against the Trinitarian doctrine may be cheap propaganda against the Christian faith by those who hold alternative convictions. You will not understand, if you do not want to understand! But let us face the facts: Even most devoted church-going Christians are puzzled by the doctrine of the Trinity.

They may believe that it is a divine mystery that must be adored, rather than understood. But why posit such a mystery in the first place? Did God not want to reveal God's creative and redemptive intentionality to us, rather than obscuring it? What precisely is so mysterious about the assertion that God is for us and with us and not against us, as proclaimed and enacted by Jesus of Nazareth? Maybe there is no mystery after all?

To assign dogmatic statements the dignity of 'divine mysteries' that have to be believed and worshipped, rather than understood, sounds devout, but they may just as well be the result of flawed theological reasoning. The failure of theologians to cast the message into comprehensible and plausible statements inevitably undermines the content and credibility of the message itself.

The New Testament exudes a different atmosphere altogether. It speaks of the mysteries of God that had previously been hidden, *but that have now been revealed*, and that could be understood, accepted and enacted (Eph. 1:8-10, 17-19; 4:12-16; Col. 2:2 f). The self-disclosure of God's creative and redemptive intentionality through the ministry of Jesus and its ongoing manifestation in the community of believers could be grasped, proclaimed and appropriated. No sophistication was needed to 'account for the hope that is in us' (1 Pet. 3:15).

We cannot blame scientists for wanting to know what 'one God in three persons' could possibly mean. They also wonder why the assumption of an amicable relation between these three persons within God should be necessary to underpin the necessity of amicable relations between humans, an assumption currently popular

among certain theologians. A modern re-conceptualisation is imperative if we are to remove this obstacle to the credibility of our message.

Its classical formulations are meant to convey the very core of the Christian proclamation: the assurance that what happened in Christ, and what happens in the community of believers on the strength of what happened in Christ, was a true and valid reflection of the intentionality of God, the transcendent Source and Destiny of reality as a whole. But they do so in a way that has become unintelligible in terms of the current empirical, historical and pragmatic world view.

The real problem is that the theological tradition presents us with a speculative, rather than an experiential, approach to the Trinity. Contemporary theologians tend to continue moving around in the 'symbolic universe' of classical theology without taking modern scientific insights into account.<sup>56</sup> An experiential-realist approach would do the credibility of theology a world of good.

It is significant that the classical Trinitarian doctrines are not found in the New Testament. They emerged when the message was translated from Jewish (dynamic) into Hellenistic (ontological) patterns of thought. Not that the problem that led to their formulation did not exist in New Testament times! It just took an experiential rather than a metaphysical form.

As an attempt to 'become a Greek to the Greeks', as Paul expressed his mission to the Gentiles (1 Cor. 9:19 ff), the translation of the Gospel into a Hellenistic frame of reference was entirely legitimate. Given the underlying frame of reference, the decisions of the 'ecumenical councils' were valid expressions of the Christian faith, as I see it.

However, in the course of this re-conceptualisation, the anthropomorphic metaphors found in the Bible (creator, father, son, word, spirit) were reified and used as building blocks for the construction of a metaphysical edifice, along with the abstract terms typical of Greek thought (being, essence, substance, person, nature, eternity, and so on).

Instead of making the Gospel message plausible and lucid for ordinary people, these formulations have cast a blanket of obscurity and incoherence over it. Instead of exposing the historical, social and existential roots of the metaphors used in the biblical tradition, they have pinned down the intellectual energies of countless theologians in speculative endeavours throughout the ages. Instead of raising the enthusiasm of participating in God's creative and redemptive project, they caused bewilderment among the laity.

## **An experiential rendering of the Trinity**

To cut a long story short, it is counterproductive to continue with this rendition of Christian faith assumptions at a time when people informed by modern science just cannot make sense of the classical Trinitarian formulations. Paradoxically, it is the experiential realism of the scientists that can help us understand our faith better. In fact, the intended meaning is quite straightforward. In experiential terms, the doctrine expresses three aspects of a living Christian faith:

<sup>56</sup> For examples, see Volf Miroslav and Welker Michael (eds), *God's Life in Trinity*. Minneapolis: Fortress Press, 2009.

- (a) The primordial experience of derivation, dependence, vulnerability, mortality and accountability to an authority higher than one's own. This experience finds its expression in the notion of God as the transcendent Source and Destiny of reality as a whole.
- (b) The authoritative proclamation and enactment of the creative and redemptive intentionality of this God by Jesus of Nazareth in the context of a retributive legal framework. The authority and validity of this interpretation of the God of Israel was reaffirmed by the message of his 'resurrection'.
- (c) The ongoing spiritual presence of the 'Spirit of Christ', that is, God's creative and redemptive intentionality, as manifest in the ministry of Jesus of Nazareth, in the collective consciousness of the community of believers.

The first two motifs may seem to *contradict* each other in experiential terms simply because they express the discrepancy between what reality *has* become and what reality *ought* to become. Expressed in theological terms, it is the discrepancy between the provisional outcome of God's creative actions and God's ultimate benevolent intentions.

Faith will throw its weight behind what ought to become against what ought *not* to have become. As Luther has taught us, faith is the tenacious and defiant trust in the benevolent intentionality of God (the 'revealed' God) *in the face of* all experiences to the contrary (the 'hidden' God).

The relation between the second and the third aspect deals with the *continuity* between what happened in Jesus of Nazareth, understood as the messianic representative of God, and what happens today in the community of believers.

The point of the third article of the Creed is: It is not another God who is now present among us, but the very God whose creative power we experience and whose benevolent intentions we proclaim on the strength of the Christ event!

On the basis of these observations, the three aspects of the Trinitarian Creed can be expressed in experiential terms as follows:

- (a) *We believe in the creative and redemptive intentionality of the transcendent Source and Destiny of reality,*
- (b) *that manifested itself paradigmatically in the Christ event and*
- (c) *that continues to be present and active as the Spirit of Christ, which permeates the life of the community of believers.*

It is clear, therefore, that the doctrine of the Trinity is an explication of the Christian understanding of what happened in Christ, thus part of the doctrine of Christ. The discrepancy between what had become and what ought to have become was keenly felt in Old Testament times, but it could only be cast into this particular formulation after the Christ event.

From a scientific point of view, all three of these facets of God's creative and redemptive presence are reflected in structures of individual and communal consciousness that are part of the hierarchy of emergences. There is nothing supernatural, mysterious, or uncanny about them.

One can further expand on the *functions* of the doctrine. The Trinity identifies the God of *redeeming love* with the God of *creative power*; the God of *intentionality* with the God of *causality*; the God of *contingency* with the God of *necessity*; the God who manifested ‘himself’ in *personal* terms for humans, because humans are persons, with the God who underlies reality as a whole, including its *infra- and supra-personal* levels of emergence.

Using Luther’s concepts, the Trinity teaches us that the ‘revealed’ God (where God’s benevolence is revealed on the cross, while God’s power is concealed) is identical with the ‘hidden God’ (where God’s power is revealed, while God’s benevolence is concealed). The implication is that the ambiguity of experienced reality is not foreign to God’s benevolence, but a necessary expression of it. Without the forces that govern reality, ambivalent as they may be, reality would not exist.

The doctrine of the Trinity is, then, a powerful statement of the one and only God who is the Source and Destiny of reality as a whole, who disclosed God’s intentionality in Jesus and who is present as such in the renewed spirit of the community of believers.

Those of us who have waded through endless theological deliberations and logical impasses to come to grips with the meaning of the Trinitarian doctrine may be surprised how simple it actually is. Scientists who are open for the spiritual dimension of human existence should have no insurmountable difficulties with this interpretation.

As a particular concept of the transcendent, the Trinity competes with other such concepts. It defines human authenticity in a particular way. It offers participation in an authentic human life thus defined. It calls for a decision for or against. It lays claim on human existence and human interaction in a compelling way. It responds, to speak with Paul Tillich, to our ‘ultimate concern’.

But it is still part of immanent reality. It can be expressed in different frames of reference; it is subject to human error; it can be critiqued, revised, corrected, augmented or discarded; it has to prove itself in terms of the criterion of comprehensive optimal well-being; it can be enriched by other convictions and enrich other such convictions. It can be served by science with information and serve science with orientation. It is variable, but indispensable.

### **Reader reaction**

If you are a lay person, which of my contentions can you affirm, critique or augment on the basis of your own faith experience (or lack of it)?

If you are a theologian, which classical heresies do you detect in my interpretation of Christ and the Trinity?

How would you summarise my proposal and your response for high school students who have been told by a science teacher that theologians, in contrast with scientists, are busy with baseless myths and fables?

## Let us summarise

In this chapter, we applied the dialectic between ‘reality’, as seen in experiential realist terms, and ‘truth’, as proclaimed by the Christian faith, to our understanding of Jesus Christ, the pivotal centre of the Christian faith.

We began with a historical-critical reconstruction of the Christ event: Jesus of Nazareth, a Jewish rabbi working in Galilee during the time of the Roman Empire, proclaimed and enacted the God of Israel as a God of redeeming grace, rather than a God of a demanding and condemning law.

This brought him into conflict with Jewish certainties and institutions of the time. He was condemned by Jewish authorities as a heretic and imposter and executed as an insurgent by the Roman authorities.

On the basis of visionary appearances, his followers proclaimed his resurrection from the dead and his elevation to the status of the expected messianic representative of God. With that, they refuted the condemnation of Jesus by the Jewish and Roman authorities and affirmed God’s identification with his life, ministry and death.

This reconstruction has important theological consequences. According to the New Testament, Jesus was ontologically a normal human being, similar to us. What made him special was his intimate relationship with God. This gave him the authority to act in the name of God as God’s messianic representative.

In his life, ministry and death, God’s suffering, transforming acceptance of the unacceptable manifested itself. His crucifixion was interpreted as God’s sacrificial self-exposure to the depravity and enmity of humankind with the aim of restoring broken relationships.

Believers discern the validity of this message even in terms of the natural world. As the transcendent Source and Destiny of reality, God continuously sacrifices parts of God’s creation to make the emergence and evolution of new parts possible. We cited the pervasive phenomenon of entropy and the indispensability of death for life as examples.

The fact that the messianic representative of God was willing to serve, be humiliated and executed on behalf of sinful humankind, implies that any abuse of privilege and power at the expense of other creatures has been rendered unacceptable in the eyes of God.

We then asked ourselves what the concept of the ‘risen Christ’ could mean in experiential terms. Various literal interpretations had to be abandoned.

The resuscitation of his corpse would have meant that Jesus would have had to die again. An entirely new quasi-bodily creation would have necessitated a new cosmos that was not subject to the constraints of space, time and low entropy energy. In both cases, we would not be able to share in his new life in communion with God, which would destroy the entire rationale of the Christian faith. The Platonic dualism between a mortal body and an immortal soul is both unbiblical and in conflict with the scientific theory of emergence, according to which the spiritual level presupposes the material levels of emergence.

To find an answer, we had to abandon the assumption that, to be true, the narratives depicting the resurrection of Jesus from the dead have to be empirically

and historically reliable accounts of what happened, rather than mythological and metaphorical expressions of an intended theological meaning. The latter branched out into conflicting legends, for instance, the empty grave and the bodily encounters with Jesus as the risen Christ.

To undergird its ultimate and universal validity, New Testament authors extrapolated the message of God’s benevolent intentionality as manifest in Christ into cosmic dimensions: a mythological past, an eschatological future, a heavenly realm, and an authentic essence underlying the appearances of reality. Christ was depicted as the instrument of God’s creation, the judge of the last judgment, the messianic king seated at the right hand of God and the authentic human being.

We then highlighted three theological claims that these narratives represent. First, God confirmed the messianic authority of Jesus to act in the name of God. Second, God confirmed the validity of Jesus’ proclamation and enactment of the God of Israel as a God of creative and redemptive love. His message was God’s suffering, transforming acceptance of the unacceptable. Third, the new life of Christ was taken out of the constraints of time, space and energy of a historical human being into the realm of universal validity and accessibility.

The Spirit of Christ, that had emerged and evolved on the bodily infrastructure of Jesus of Nazareth, was transferred to the new bodily infrastructure of the community of countless believers through processes of communication. We described the ‘Holy Spirit’ as the ‘Spirit of Christ’ that permeates, liberates, transforms and empowers the ‘Body of Christ’ (the community of believers).

‘Spirit’ was taken in the experiential-realist meaning of structured and oriented individual and communal consciousness. What makes this spirit different from other such phenomena is not its divine (rather than human) nature, but its quality as ‘holy’ or ‘authentic’ spirit in contrast with an ‘unholy’ or inauthentic spirit. Because God is the transcendent Source and Destiny of reality, the ‘Holy Spirit’ must be conceptualised as both divine and human, with the divine Spirit manifesting itself through the human spirit.

In the final section, we translated the classical doctrine of the Trinity from Hellenistic ontological abstractions into the dynamics of the New Testament narrative: (a) The God of Israel, understood as the transcendent Source and Destiny of reality as a whole, (b) manifested God’s benevolent intentionality in the life, ministry and death of Jesus of Nazareth, and (c) elevated him to the status of God’s universal messianic representative—accessible and active in his Spirit among the community of believers.

The interpretation of the doctrines concerning Christ and the Trinity thus presented is based on the approach of experiential realism. There is no paradox in these assumptions. They contradict no scientific findings. They are also in line with the biblical witness. This is an example of how the scientific approach can help theology to become more comprehensible and plausible for our scientifically informed contemporaries.

# 10

## The 'real' future of reality and the 'true' future of God

### Reader reflection

A devout believer, 96 years of age, once confessed to me that she cannot believe that she would rise to a new life after her death. How would you have responded?

Are those who prophesy the imminent end of the world and the second coming of Christ on a specific date closer to the truth than those who do not believe that this will ever happen?

Do you have any concrete notions of how the coming 'Kingdom of God' could look like and how it would operate in the world we know and of which we are a part?

### What this chapter is all about

Traditional Christian eschatology posits a resurrection from the dead and a future reconstruction of reality as a whole. The present age will come to an end and a new age will dawn. There will be no human depravity, no destructive conflict, no suffering, no tears, no death—in sum, no discrepancy between what *has* become and what *ought* to become. God's future will bring about the 'Kingdom of God', a 'new creation', a 'new heaven and earth', a new society, a new body, a new heart.

These assumptions are based on apocalyptic visions that emerged in late post-exilic Judaism. Several New Testament authors expected this reconstruction of the universe to happen in the immediate future, in fact, within their own lifetimes. Even Paul thought he would be alive when Christ returned, when he wrote 1 Thessalonians 4:13-18. By the time he wrote Philippians 1:21-26, he was no longer so sure.

But after close on two millennia, the cosmic transformation has not come to pass as expected. In the estimation of our scientifically informed contemporaries, the probability that it will ever come to pass is virtually nil. The law of entropy precludes the realisation of an ideal world that is in any way continuous with the ambiguous world we experience here and now.

Many modern theologians have tried to find a way out of the impasse without abandoning the apocalyptic framework.<sup>57</sup> But it is not likely that these attempts will convince hard-nosed scientists. Their scepticism challenges believers to ask what the intentions behind the eschatological propositions of the Bible might have been.

Section I of this chapter argues that biblical eschatology articulated a dynamic and constantly changing *vision of what reality ought to become*, in response to the experience of what reality ought *not* to have become. Section II proposes that the intended meaning of the biblical concept of ‘eternal life’ refers to *authentic human life* rather than longevity.

## Section I

### The future of the universe and the ‘coming Kingdom’

#### The misleading idea of perfection

Apocalyptic eschatology expected a perfect world—a world without sin, evil, suffering and death. This can only be an expression of what reality *ought* to be, formulated in response to the experience of what reality ought *not* to be. The reality that we experience, of which we are a part, and which the sciences explore, is not perfect. In fact, it is highly ambiguous. More than that, the sciences tell us that it *cannot* be perfect.

This is not due to a regrettable accident in which God has lost control. It is not due to the power of an evil counter-god or devil. It is also not due to human sin. It belongs to the intrinsic nature of the universe we experience and that we believe is being created by God as it unfolds. The entropic process is not a mistake in the design of the world, but the precondition of its operation.

In terms of physics, reality can only function until no ‘energy far from equilibrium’ is left, an energy that could be transformed from potent (low entropy) energy into spent (high entropy) energy. This may indeed happen at the end of cosmic history. But then the universe would also cease to exist.

The world we know has never been, and cannot ever become, perfect. As apocalyptic eschatology realised, perfection would spell the end of the world we know. But it concluded that God would then have to start from scratch and create a new world or transform the present one dramatically.

However, a world that has reached a perfect state would be an immutable monument, rather than a dynamic process. Without the flow of time, nothing can happen; nothing can be done; nothing can be achieved. And nothing would need to be done, because it could not improve an already perfect reality.

It is a dynamic, imperfect reality that makes us alive, that makes us have aspirations and visions, that calls for our commitment and dedication, that allows us

<sup>57</sup> For an overview of the recent theological debate, see Robert John Russel, *Eschatology and Scientific Cosmology: From Deadlock to Interaction*, Zygon, vol. 47, no. 4 (2012), pp. 997-1014.

to hope for a better future. Perfection may function as a vision that gives us direction. But then we must re-conceptualise this vision to reflect what the reality we actually experience *ought* to be, rather than as a prediction of what it *will* be.

Eternity, universality, harmony, pure intentionality, pure act and pure essence—these darling concepts of Platonic philosophy are static abstractions from the flow of time, from situation-specific locations in space, and from the tension between power concentrations that make a dynamic process possible.

The concept of perfection is often found in the Bible, but not in the Platonic sense of an ideal state. Often it can be translated as ‘awe-inspiring’, rather than ‘faultless’. Often it denotes the trustworthiness of God or humans (2 Sam. 22:31). Often it has ethical, rather than ontological connotations (e.g. Deut. 32:4; Ps. 19:8; Isa. 38:3; Matt. 5:48; Rom. 12:2; 2 Cor. 13:11). More typical for the biblical faith than the concept of perfection is the concept of peace and prosperity (*shalom*), or the ‘rest’ of the people of God in the Promised Land (Heb. 3:11-4:11).

In the prophetic (rather than the priestly) tradition, to be perfect means to be of one mind with God, to share God’s creative power, God’s concern for social justice and God’s redeeming love. The post-exilic priestly tradition demanded *ritual* perfection. Animals brought for sacrifices, for instance, had to be without blemish. But even ‘without blemish’ is not the same as perfection. The priestly tradition also ceased to play a role in New Testament times. Even the Letter to the Hebrews, where this tradition enjoys centre stage, wants to put it to rest for good.

As we have seen in the last chapter, there are projections of what ought to be to the beginning of time, when everything *was* very good, to the end of time, when everything *will be* very good, to an alternative space (heaven above) where everything *is* very good, and to the essence of reality, where everything was always *meant* to be very good. All four projections signify God’s benevolent intentionality, or God’s dynamic vision of comprehensive optimal well-being. But that is something different from a static state of perfection.

## Future expectations in the Bible

In terms of the biblical faith, if reality were perfect, there would be no need for God’s redemptive project in the world. It is the *imperfect* reality, of which we are a part, that is in need of transformation. Only a reality in flux can be subject to a dynamic transformative process. And a transformative process is what God seems to be aiming at—at least according to virtually every biblical document.

Biblical future expectations emerged and evolved as a series of redemptive responses to historically and situationally conditioned needs. In the Old Testament, Abraham needed authentic male progeny from his legitimate wife in contrast with offspring from a slave girl; the Israelites enslaved in Egypt needed freedom; Israelite nomads trekking through the desert needed a land to settle; Israelite tribes harassed by the Philistines needed a central authority (the king) to defend themselves; Babylonian exiles needed permission to rebuild the cultic centre in Jerusalem.

In the New Testament, sick and crippled people needed healing; outcasts needed re-integration; sinners needed forgiveness; disciples devastated by the execution of their leader needed reassurance and a new mission; believers condemned by the law needed God’s grace; Gentiles excluded from the people of God needed acceptance into the people of God.

In the process, biblical future expectations gained ever wider horizons (from clan to tribe, then to the nation, all nations, all cosmic powers, reality as a whole) and greater depths (progeny, land, status as a nation, a new covenant, a new kind of heart, a new kind of body, a new kind of international politics, a new kind of natural world, a new heaven and earth).

By the time of the New Testament, a great variety of traditions about God's future had emerged, each with its own historical and situational roots in the context of changing world view assumptions. Here are some of the more important:

- The continued blessedness of the clan/tribe/nation (survival)
- The restoration of the Davidic kingdom (national politics)
- The Day of the Lord (judgment over pagans and deviant Israelites)
- The Jewish empire (international politics)
- The Kingdom of God (priestly theocracy)
- The Son of Man in Daniel chapter 7 (righteous rule versus beastly oppressors.)
- The blessing of the Suffering Servant in Isaiah chapter 53 (the status of Babylonian exiles?)
- Resurrection to face judgment (post-exilic theodicy)
- The recreation of reality as a whole (apocalyptic theodicy)
- Death and resurrection to issue in a new creation (Paul)

All these traditions reflect idealised human experiences, idealised because they wanted to express a redeemed reality. God himself would rejoice over 'his' (existing) creation because his benevolent intentionality had come to full fruition. Each of these traditions emerged and evolved in history, branched out in various sub-traditions and remained controversial among Jewish and Christian believers.

Most lost their relevance, disappeared, or declined already in biblical times. In the New Testament, many earlier forms no longer play a role (male progeny, the Promised Land, the temple cult in Jerusalem). Often they have acquired a new meaning (Abraham as 'father of the faith'; return to the land as 'rest' in Hebrews; the messianic king as the crucified, yet glorified Christ; the 'new Jerusalem').

Resurrection from the dead to face judgment and the apocalyptic reconstruction of the world constituted the most radical of these expectations, but they were part of a whole series. They were never generally accepted in Judaism. They also had 'pagan' precedents or parallels. Egyptian ideas about judgment after death, and the Parsist view of history as the conflict between good and evil, which would end up in the eradication of evil, seem to have had a considerable impact on biblical eschatology.

The transition from classical Israelite prophecy to apocalyptic eschatology is fluid, yet clearly discernible. Isaiah chapter 65, for instance, belongs to the ancestry of apocalyptic, but it is not yet an apocalyptic text. For Isaiah 65, it is still the 'people of God', located in Jerusalem on its 'holy mountain', that occupies centre stage. The rest of humanity is beyond the horizon.

Overstatements are used to highlight the awesome character of the reconstructed reality: A hundred-year-old will be deemed a 'youth'; there will be no weeping, no destruction, no harm, no premature death, no alienated property, no meaningless work. Even nature will no longer suffer: wolf and lamb will feed together and lions will eat straw. Note that there is still no concept of a resurrection of the dead, only the ideal of a matured and fulfilled life.

Early Christianity, in contrast, was steeped in the apocalyptic world view. Due to the non-arrival of the ‘second coming of Christ’, however, the emphasis shifted from ‘future eschatology’ towards ‘present eschatology’. Christ was believed to be enthroned above all cosmic powers already; believers were already with him in the ‘heavenly places’; they already shared in his new life (Rom. 6; Eph. 2:1-10; Col. 3:1-4; Luke and Acts; Hebrews; John).

In later church history, the apocalyptic transformation of reality was relegated to the far future. The eschatological focus fell on life after death: purgatory, last judgment and eternal life in heaven or hell. The ‘Kingdom of God’ had become an ‘ecclesial empire’ under the Pope as the representative of Christ, the Ruler of the universe. The Church had become an institution that dispensed God’s grace in exchange for money, ascetic exercises, or ‘good works’.

This short overview shows that assertions of faith about the future are intrinsically unstable and ephemeral. The question arises whether contemporary theology should deem the literal interpretation of any one of the biblical future expectations valid beyond its particular historical and situational context.

It is the dynamic thrust of the message of God’s creative and redemptive intentionality that brought such statements about, that formed the continuing undercurrent of meaning and that gave each one of them its rationale. This is the thread that our expectations should pick up and develop for our times.

## Visions and predictions

Prophetic visions are anything but clandestine oracles or scientific predictions. Hardly any of them have ever materialised the way they were formulated. Their function was to warn and reassure people on their way through history. Taken literally, many of these traditions are unrealistic in scientific terms. But it is questionable whether they were ever meant to be taken literally.

As mentioned in chapter 5, antiquity knew nothing of the Enlightenment criteria of empirical evidence and historical precision. It utilised all linguistic tools available at the time to make a point—myth, legend, fiction, poetry, parable, metaphor. Its world was full of gods, angels, demons, monsters, miracles and astrological constellations. In antiquity, the boundaries between empirical or historical fact, metaphor and superstition were permeable.

Seen with modern eyes, the metaphorical character of many of these expectations can hardly be overlooked. Prophetic utterances often made use of symbolic overstatements: Mountains will be flattened and valleys lifted; sun and moon will lose their light; heaven and earth will be torn asunder. An impoverished person will be raised to the status of a prince; an oppressed or sick person will be taken out of the pit; lions and lambs will rest and feed together in peace; faith can make a mountain translocate into the sea.

Some older Israelite-Jewish expectations of a ‘defeat’ of death and a ‘new’ world order, centred on Mount Zion, fall into this category (Isa. 25:6-10). Apocalyptic visions radicalised this trend towards the unlikely, supernatural and mysterious.

They were deliberately expressed in symbols and metaphors. Suggesting total improbability, even impossibility, apocalyptic eschatology proclaimed God’s unconstrained mastery and benevolence in the face of all experiences to the contrary. Apparently, such radical statements were meant to reassure the victims of oppression and persecution.

Just look at the unlikely detail of the ‘new Jerusalem’ in Revelations 21. Note that this document was written after the earthly Jerusalem had been razed to the ground by the Romans.

For the people of God—Jews and Christians—it had become a no-go area. The old certainties and expectations concerning this city were smashed and had to be transcended.

The new Jerusalem would be a city descending from heaven as a perfect cube, each side being 2400 km (almost twice the distance from Johannesburg to Cape Town), made of pure gold, yet transparent like glass, with twelve gates, each made of a single gem stone, yet never closed, a city that can thrive abundantly without needing a sun! Taken literally, all of this depicts a most unlikely scenario. It symbolises the new beginning based on the Christ event. It reassures believers of the creative and benevolent intentionality of God, when all human hope had been lost.

The same metaphorical language is used in the narratives about the second coming of Christ. He was taken to heaven in a cloud and seated at the right hand of God. He would come again with the clouds at the sound of a trumpet to judge the living and the dead. Believers would be taken up to meet him in the skies. Let us be honest—were these statements ever meant to be empirical descriptions of events to come, or not rather metaphors meant to refer to a new spiritual dispensation?

The Christian faith proclaims God's creative and redemptive intentionality, God's vision of comprehensive well-being, God's concern for any discrepancy in well-being in any dimension of life, and God's suffering and transforming acceptance of the unacceptable.

This proclamation inevitably goes beyond what seems possible and likely to happen at any given point in time—beyond human depravity, social injustice, poverty, fateful inevitabilities, suffering and death. A vision indicates the direction in which the cosmic process ought to move. What ought to be is not limited by the constraints imposed by the current constellation of time, space, energy and regularity.

Constellations can and do change. Things that seemed impossible at present may become possible in the future. A vision always runs ahead of its time. But a vision is no guarantee that its expectations will materialise. What *ought* to become is always different from what *will* become. The 'real' future is always beyond human reach—including the reach of the prophets!

Christian eschatology is a *protest* of what ought to become against what *has* become and seemingly *will* become—and that in the name of a powerful and loving God. Its content is informed by the experience of what ought *not* to be, rather than by the insatiable human desire for an afterlife, or wild speculations about another world.

It speaks of a kind of fellowship with God and with each other that is no longer impaired by secrecy, suspicion, selfishness and guilt; of a kind of life that is no longer threatened by diseases, famine, violence, frustration, meaninglessness and death; of a world where all living beings can reach their full potential.

## Theological problems

When we take apocalyptic visions literally, we run into trouble. Apart from their historical relativity, their symbolic character and their scientific improbability, there are fundamental *theological* problems that, in my opinion, should make the apocalyptic pronouncements virtually unacceptable for us today, at least in a Protestant context.

Apocalyptic eschatology gave up on the transformation of existing reality. It envisioned the total eradication of the present evil world and the creation of a perfect world in its place. The world as a whole was deemed beyond repair—God had to begin from scratch. At the personal level, the last judgment—whether after death, at the point of death, or in an indefinite future—was taken to be final. No redemption was envisaged for individual sinners who had wilfully transgressed the law during their lifetimes.

But can all this be true in terms of the Christian faith? Does God love the world God created and continues to create to such an extent that ‘he gave his Son’, or has God become fed up with this world to such an extent that ‘he’ wants to put an end to it? The God that we know from the broad sweeps of the biblical tradition is surely not a God who gives up on God’s creation.

How does this negative attitude fit in with the doctrine of justification by grace, rather than by moral achievement or perfect disposition? This is the ‘article with which the church stands and falls’ according to Protestant convictions! The biblical God always grants God’s people another chance, always seeks its redemption, always opens up a new future.

This is not a God who insists on perfection and crushes those who cannot reach it, but a God of mercy, a God who accepts and suffers the unacceptable to change them from within God’s fellowship. At least, this is the interpretation that Jesus of Nazareth gave to the God of Israel. Even the law of God was not meant to judge, condemn and destroy us, but to keep order and expose sinful attitudes and actions.

According to the Protestant tradition, the ‘political use of the law’ has the function of maintaining order in a sinful world. The ‘theological use’ of the law has the aim of exposing sin and bringing wayward people to their senses, not to root them out. Superseding both uses of the law, the gospel proclaims God’s suffering, transforming acceptance of the unacceptable in Christ. It involves the human being in God’s creative and redemptive project (misleadingly called the ‘third use of the law’). It invites us to participate in God’s sacrificial love in Christ.

Followers of Christ should not deem it necessary to pursue their own survival, prosperity and longevity at all costs. Having been granted ‘peace with God’, that is, being certain of divine acceptance and belonging, they should be able to invest their lives in the well-being of others, just as Christ had invested his.

The preoccupation with one’s own eternal glory and bliss goes in the wrong direction—concentrating on one’s own prosperity, rather than the needs of others. It is in line with the modern culture of unrestrained greed and pleasure-seeking, rather than the new life of Christ in fellowship with God.

In biblical times, the *experience* of what ought *not* to have become in a given situation led to a *vision* of what *ought* to become. This vision was underpinned by the proclamation of God’s creative mastery and benevolence and the invitation to participate in God’s redemptive project in the world.

We need to regain this rationale if we want to make a difference in the world of today. In view of the economic-ecological crisis, a rekindling of the sacrificial spirit of Christ is more urgently needed than ever before.

## Prophetic utterances are warnings and reassurances

Biblical future expectations are always tantalisingly immediate to the present (in theology called *Naherwartung*). They are expected to happen 'very soon' or 'without delay'. Apocalyptic eschatology was a radical proclamation of *imminent* transformation and renewal. Once such expectations are projected into the *far future*, they lose both their rationale and their relevance.

Almost none of the prophetic pronouncements found in the Bible have materialised precisely as expected. And yet, this did not undermine the biblical faith in the least. Such 'prophesies' were constantly reinterpreted in response to changed circumstances, perceived needs and world views. There was never a guarantee that an envisaged future would come to pass. What does this fact say to us about the true intentions of God?

It shows, in the first place, that the prophetic utterances were meant to be reassurances and warnings in concrete historical situations, uttered by humans in the name of God, rather than supernatural oracles or scientific predictions. They were not meant to articulate eternal truths. We should also concede, on the basis of a critical analysis of the texts themselves, that prophetic utterances were as susceptible to human error as any other human expectation.

In the second place, we must regain the biblical view that God does not only speak through prophetic intuitions, but also through the way God's creation *actually* functions (Rom. 1:19-20). The world we know does not operate in a way that a situation void of suffering and death can be expected to materialise.

Due to the work of the natural sciences, this has become much clearer than ancient believers could ever have guessed. To attribute the validity of natural laws, which seem to make life without death impossible, to our God, the divine Creator, is *an act of faith*, not of secular unbelief!

## Entropy and eschatology

Taken literally, the vision of a perfect world is utopian. According to science, it is highly improbable that it will ever materialise. The world, as we know it, will indeed come to an end—either in a 'big crunch' or in an infinite dispersion of potent energy. But this end will not usher in a new world that will operate without the constraints of time, space and energy.

Taken seriously, the challenge of the scientific theory of entropy to conventional Christian eschatology is profound and inescapable. Because they are convinced of the unlimited power of God, many believers go overboard with their expectations. Apocalyptic is the most radical example of this phenomenon, but there also less dramatic ones, such as the resuscitation of a corpse, or the restoration of an amputated limb.

Science can help Christian hope to remain realistic. Reality, as we know it, has regularities and constraints that are built into the system—and that for very good

reasons. Reality could not function without them! This is how God has created the world! More especially, science tells us that entropy, the most pervasively destructive force in reality, is essential to supply the energy that makes the evolutionary process, thus reality as a whole, possible. It cannot be removed from the reality we know without erasing this reality.

Depending on the cosmic balance between entropy and gravity, the universe ultimately has to face a ‘freeze or fry’ scenario. By that time, we will no longer be around. All life will have been eradicated. Even the solar system will have disintegrated. As far as we know, therefore, the universe will indeed come to an end, as the biblical faith assumes, but this end will not usher in a new reality void of all evil in which we could happily and endlessly live and prosper.

Perhaps God could have created an alternative reality that was not powered by entropy. Perhaps God can still do so. God is, after all, transcendent, and we cannot possibly know what God is up to. We have no idea of the resources at God’s disposal. But we must not allow ourselves to be carried away by speculations. Such speculations are dangerous. They have often misled believers into irrational and irresponsible actions. They have often diverted their attention and their energies from the real tasks at hand.

If we continue to expect that a completely different universe *will* come about in the not-too-distant future, as certain parts of the New Testament assume, we have to account for such an expectation. As the following examples show, this is by no means easy to do! The real question is, however, why we should try to rescue apocalyptic eschatology in the first place!

### Untenable solutions

1. That the prospect of a new world has been *revealed* is not sufficient an argument, because revelations are insights gained by human beings in particular situations and interpreted in terms of changing world views. Apocalyptic is a world view among others that appeared in a particular cultural realm and during a particular period of ancient history, rather than part of the ‘eternal’ Word of God.

We have to ask, therefore, by whom, for whom, for which reasons, and under which circumstances such an expectation was formulated—and why other authors of the biblical Scriptures have not come to the same conclusions. You will find a fairly plausible suggestion at the end of this section. See whether it satisfies you.

2. Common logic can be deceptive. Look at the following argument: ‘If it is impossible, it cannot be true. But if it is true, it cannot be impossible.’<sup>58</sup> This statement seems to emerge from a courageous faith, when uttered in the face of all indications to the contrary. It also seems to be logically sound.

But it is built on the assumption that empirically demonstrable fact constitutes the only valid criterion of truth, whether such fact belongs to past, present, or future. It does not take the metaphorical character of faith assertions into account. It assumes that apocalyptic utterances were meant to be something akin to scientific predictions, rather than symbolic visions of what ought to be. These assumptions have become untenable.

3. Theologians often argue that the grounds for the expectation of an eschatological future must be seen in the message of God’s unconditional benevolence, or God’s unshakeable

<sup>58</sup> R. J. Russell, *Cosmology from Alpha to Omega: The Creative and Mutual Interaction of Theology and Science*. Minneapolis: Fortress Press, 2008, p. 304.

commitment to God's creation. Again, this argument seems theologically sound. However, it is an inference drawn from an unsupported assumption, namely the assumption that God's creative power and God's redeeming love are not subject to constraints.

The fact is that there are such constraints in the reality we know. God has brought about the reality 'he' created through built-in regularities. God also keeps this reality going at great cost to 'himself'. As we have seen, God's commitment is sacrificial, and we are invited to participate in God's suffering, transforming acceptance of the unacceptable.

4. Believers often argue that the expected new reality will come about through the *unmediated* initiative and agency of God. The potentials embedded in natural processes and human agency will play no role in bringing it about. So scientific analyses of what is possible in the world we know simply do not apply. The 'Kingdom' will come 'vertically from above', to use an early formulation of Karl Barth.

Faith is indeed a bold insistence on God's benevolence in the face of all indications to the contrary we experience in this world. But faith should be wary of speculative inferences from an idealised abstraction, the abstraction of absolute divine mastery and omnipotence. What we *actually* experience is that God—assuming that God is creatively and redemptively involved in the world process—utilises human ingenuity and natural processes to move in the direction of 'his' vision of comprehensive optimal well-being.

The evolutionary process is one such mechanism; human agency is another. Human efforts should try to fall in line with the processes of nature that go in a positive direction, because that is where God's creative power is at work. We should therefore also be wary of juxtaposing our current reality, which is subject to time, space and energy constraints, with a divine reality that is free from these fetters, thus eternal, universal and harmonious. As we have seen, this argument is of Platonic, rather than biblical origins.

To recap: Eternity is an abstraction from time; universality is an abstraction from space; harmony is an abstraction from actual power plays that keep the cosmic process going. Without time, space and power differentials, reality as we know it could not exist. Where there is no time, there is no movement, no process, thus no life. Where there is no space, there is no locality, thus again, no life. Where there is no disequilibrium, there is no energy, thus again, no life.

5. The *existential* concept of 'eternal life' found in the New Testament (meaning authentic life) must be distinguished from its *idealistic* counterpart (meaning unconstrained life) and all the unwarranted speculations based on the latter. As a Platonic abstraction from time, eternity has been used by theology to posit a kind of 'divine' reality that is not subject to time. But given the fact that God is transcendent, how can we possibly know that?

What we *actually* experience is the creative power of God in reality and a proclamation that responds redemptively to changing human needs and predicaments. And both of these are subject to the constraints of space, time and energy.

The postulate of the existence of an 'eternal' reality sounds like an attempt to circumvent the inescapable end of everything that exists and happens, as we actually experience it. It assumes an alternative reality that is either timeless, or contains all of time, or an 'eternal now'. But all such concepts cannot be experienced; they cannot even be imagined.

The Bible is much more realistic. The Hebrew language has no word for 'eternity'. *Olam*, which is usually translated as 'eternity', indicates the time span from the deep unknown past to the remote unknown future. It means 'forever'. It indicates that something is 'always valid' as long as we and our descendants live. Even the Greek word translated as 'eternity' originally referred to 'the age' as a whole (*aion*), not to timelessness.

A frequent biblical expression is 'up to the end of the age', which assumes that God is creatively and redemptively active within current reality until this reality will come to an end. The biblical expression 'from age to age' makes no sense if translated as 'from eternity to eternity' because eternity has no 'from' and no 'to'.

6. Some modern theologians have suggested that eternity must be conceptualised as 'timefulness', rather than 'timelessness'. This idea says that an omnipotent God must have

‘simultaneous’ access to past, present and future and that, by implication, we shall have such access when we are taken up into ‘eternity’.

This sounds great, but it is pure speculation. To be more precise, it is an abstraction from real time and an abstraction cannot claim to be real. What we *actually* experience is an irreversible sequence of events from the past to the present and on to the future.

The idea of a ‘timeful’ eternity overlooks the essential difference between what happens to be *now*, what is no more, and what is not yet. We can always only exist in the present. The past is no more, thus not real; the future is not yet, thus not real.

The argument that God must be able to ‘experience’ past, present and future ‘simultaneously’ is an inference from the assumption of divine perfection, rather than a description of how the reality God creates actually functions. Only the impressions that the past has made on our memories and the impressions that possible futures are making on our anticipations can be considered real in experiential terms.

Making use of an anthropomorphic metaphor, we could say, at best, that God ‘remembers’ all of the past and ‘anticipates’ all of the future. This is how the Bible argues. But this cannot be called ‘eternity’, because the sequence of time from future through present to past is maintained.

One also cannot enlist the help of the postulates in physics that time is, in principle, reversible, or that there is something like a four-dimensional space-time ‘block universe’ that already exists as a whole and one can move about in it in all directions.<sup>59</sup>

These postulates are based on mathematical abstractions from real space and time. A reified Platonic abstraction is not real! If one projects time on to a spatial model in the form of a line, one can go to and fro on this line, just as one can go to and fro on lines indicating the three spatial dimensions. But in real time you cannot go to and fro from future to past and back. Time is *not* a spatial dimension—it always moves in only one direction.

The Bible seems to be more realistic than physics in this regard. Though it asserts that ‘all things are possible for God’, there is no text in the Bible that says that God ever went back into the past to repair something that went wrong there. It never states that God runs ahead of us into the future for whatever reason. God always picks us up where we are and takes us into a more wholesome future.

7. The idea of the ‘eternal now’ is also misleading, because the ‘now’ is everything but eternal. It only exists in the form of a relentless flux of time from the future to the past. We can indeed always only live in the ‘now’, but that does not make the ‘now’ timeless, because it depends on oncoming future and receding past. There will be a time when our own lifetimes run out of future and drop into the past. Then the ostensibly ‘eternal now’ has come to an end. The same is true for the ‘lifetime’ of everything that exists and happens, including the universe as a whole.

8. Finally, experiential realism shows that the sequence of ‘promise’ and ‘fulfilment’, often used in the Bible and in subsequent theology, cannot work as an explanation of the biblical message. As mentioned above, prophetic visions of the future rarely ever materialised the way they were expected to happen. This shows that prophecy was never intended to consist of oracles or predictions.

Prophecy was a warning of what might happen if a problematic direction was pursued or a reassurance that God was still in charge of a desperate situation. Prophets proclaimed God’s benevolent intentionality within a particular context. Was

<sup>59</sup> For a sophisticated discussion of the ‘block universe’, see Polkinghorne and Isham in: Russel, J. Robert, Nancy Murphy, and Christopher Isham (eds), *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action* (second edition). Vatican: Vatican Observatory Publications/Berkeley, CA: Center for Theology and the Natural Sciences, 1996, pp. 139–47.

the intention of the warning or promise invalid if it was never fulfilled? No ways! It was retained, adapted and applied to the next predicament!

## Christian hope in terms of experiential realism

We have seen that biblical future expectations began on a humble and mundane level, became more comprehensive and ended up in radical eschatological visions. The thrust was always to formulate a vision of what ought to become in response to the painful experience of what ought not to have become.

Against the background of modern scientific insight, we can summarise biblical future expectations as *God's vision of comprehensive optimal well-being, which translates into God's concern for any experienced deficiency in well-being in any aspect of life*. A vision is not a prediction, but a motivating direction. Looking at the greater sweeps of biblical history, we can also say that God's vision, as believers experienced it, is like *a shifting horizon that moves on as we approach it, revealing ever new vistas, challenges and opportunities*.

In biblical times, the expectations of believers constantly adjusted to changing situations. The divine vision is, therefore, a highly dynamic and situationally determined concept. God does not seem to be heading towards a future that never arrives and cannot arrive, but invites us to get involved in an ongoing transformative process towards goals that seem to be out of reach at present, yet not unattainable in principle.

Let me unpack the above statement in the light of what I have said before. Apocalyptic eschatology is by no means typical for the Old Testament faith. Taken literally, it is no longer feasible. What we can learn from it, however, is its awareness of the *comprehensive dimensions* of what ought to be. That is indeed an indispensable insight. That apocalyptic eschatology depicted a cosmic drama in the form of weird symbols and obscure images does not take away from its validity.

The problem I have with apocalyptic thought, if taken literally, is the assumption that for God everything must be possible. Scientific insight shows us that, given the world of which we are a part and that God created, not everything is possible. There are constraints and regularities that are built into the system. Natural laws exist and are valid. They are indispensable, because without them, reality would not be able to function.

So they are part of God's benevolent intentions. Evolution depends on entropy. Death is necessary for life. A healthy spirit presupposes a healthy brain, thus a healthy body. Well-being for some may be costly for others. What we must strive for is a balance between a variety of legitimate needs and interests. That is why I inserted the word 'optimal' after the word 'comprehensive' in the formulation above. It refers to the best situation attainable under any set of circumstances.

For our hope to become credible, we need to heed the fact that a vision of what ought to become must be geared to the experience of what ought *not* to have become. It must respond to the real injustices, atrocities, predicaments and ambiguities experienced in our daily lives, in society and in nature. Human needs, predicaments and depravities constantly change and God's creative and redemptive responses to these phenomena change accordingly.

A situationally and historically concrete hope motivates and energises us to pull our weight, rather than disempowering us with promises of an other-worldly paradise in an

indefinite future. Our hope must again be geared to the imminent, or at least the foreseeable stretch of time ahead of us (*Naherwartung*), as originally intended in the biblical witness.

We must revert to the experiential realism found in the Old Testament. Here punishment and reward happen through the consequences of our behaviour for ourselves and our progeny in this world. The late post-exilic concept of a ‘last judgment’, expected to happen beyond death, only reinforces the seriousness and validity of God’s justice when it does not seem to materialise.

Call a spade a spade! What are the consequences of current institutions, procedures, attitudes and patterns of behaviour? Where is the idolatry located in the current economic system? Which goals are delusory in realistic terms? Which social structures and processes are oppressive and exploitative? Which kind of mindset is destructive? What would be the creative and redemptive consequences of the *alternatives* we could envisage, propose and implement?

## Going beyond what seems possible

When I propose that we abandon unrealistic expectations, therefore, this does not mean that we should become despondent or fatalistic. On the contrary! Realistic goals enthuse and motivate, while unrealistic goals lead to disillusionment and drain our spiritual resources.

To face the future realistically, however, we must indeed transcend what seems possible at any point in time and space. There are potentials within every situation that we are not aware of and that might materialise over time with the help of God.

Reality-transcending hope is a formidable inventive and creative spiritual force that has performed countless ‘miracles’ in the past. That is the merit of the ‘theology of hope’.<sup>60</sup> A transcending vision prevents us from being bogged down by narrow mindsets, fatalistic attitudes and current obstacles. It motivates us to strive courageously and relentlessly in the direction of comprehensive optimal well-being.

But it does not allow us to indulge in an ‘overshoot’ of hope into a never-never land that is so typical for apocalyptic eschatology. I also do not think theologians should try and rescue this kind of eschatology. Science warns us that what is virtually impossible is not likely to happen. The entropic process will not subside. Biological death will not be overcome. An amputated leg will not suddenly re-grow, however ardent our prayer.

When overstressing itself, faith may either collapse or become delusory. Intentionality is a dynamic, historically consequential motivation. In contrast, a passive and constantly frustrated hope eventually has no place to go except into an imaginary alternative reality beyond space, time, energy and regularity.

To transcend the given situation is healthy if it is the expression of a defiant protest against evil and inevitability in the name of a benevolent God. It is not healthy if it becomes an expression of a lost hope for this world. While we should

<sup>60</sup> See Jürgen Moltmann, *Theology of Hope: On the Ground and the Implications of a Christian Eschatology*. London: SCM, 1967.

train our imagination to go beyond what seems feasible at present, therefore, it should translate into a practical commitment to remove deficiencies in well-being that can be removed.

We cannot overcome death, but we can indeed serve life as long as it lasts. We can indeed try to prevent premature and miserable deaths. We can indeed try to overcome human depravity, social injustice, economic deprivation, physical suffering, frustration and meaninglessness. We can indeed alleviate the consequences of natural catastrophes. We can indeed 'make the world a better place to live in'. We can indeed make our impact on nature ecologically sustainable and economically equitable.

But our vision must stay within the limits of time, space and energy that are accessible to us and relevant to our lives as human beings. What happens in distant galaxies, what happens after our solar system will have dissolved billions of years from now and what could have happened if the evolution of energy conglomerations had followed a different set of regularities is irrelevant for our lives in this world.

While such questions may be intriguing for our inquisitive minds and while science fiction may be a pleasant pastime, these realms of cosmic reality are beyond our reach and should not determine our faith in practical terms. If they do, they will draw our attention away from the concrete challenges, opportunities and tasks that God opens up before us and take us into a world of fancy and speculation.

## Hope as a defiant protest

What if the proclamation of God's benevolent intentionality does not seem to materialise in the form of a resolution of conflicts, the establishment of justice, the achievement of prosperity, the overcoming of suffering, the abolition of death? Such is indeed the human condition! But the biblical tradition does not, therefore, deem the proclamation of God's benevolent intentions invalid or superfluous.

On the contrary, it is precisely when confronted with impasses and frustrations that humans need to see the light at the end of the tunnel. It is a characteristic of the biblical faith that it proclaims its basic message again and again in response to new challenges, needs and predicaments. The underlying thrust of the message—God's vision of comprehensive, optimal well-being—is as valid and essential as ever and cannot be invalidated by non-fulfilment.

The natural sciences help faith to discover its own true nature. Faith is not about the observation, explanation and prediction of reality. Faith is about vision, orientation and commitment. Faith is not about what once happened, what has now become, or what is going to become, but about what ought to become. Faith is the great 'nevertheless' that flies in the face of experienced reality.

Faith is trust in the face of disappointment, hope against hope, a rebellious attitude, a defiant protest against the reality we experience and that the sciences explore, in the name of a God with benevolent intentions. God is love; God is light. The world we know is wonderful beyond measure. Life is great. Life is a most unlikely reality, the most unbelievable experience, the most precious gift. There

is always a future ahead of us until we have died. And our limitations are not the limitations of God!

Faith enjoys the wonderful life in a wonderful world as long as it lasts and praises God for it. Faith is a commitment that draws the last bit of life out of the decaying world, a commitment that is capable of suffering and sacrifice, just as the God it believes in, is characterised by suffering and sacrifice.

The fact that the world we know is constrained and that these constraints are built into the fabric of the creation of God does not discourage but emboldens us. It is a world open to growth and transformation, a world that we can impact with our visions, intentions, decisions and actions.

Faith is commitment to God's vision, a commitment that is entirely realistic concerning the ambiguous character and final outcome of the world process, yet it does not give in. With God, faith throws in its weight in the struggle of life against death, justice against injustice, loving concern against indifference and callousness. This is how the 'true' future of faith moves against the 'real' future predicted by science.

However, science can also open our eyes to see that this positive orientation towards what ought to be, which throws its weight against what has become and what seems to be the inevitable and inescapable future, characterises the whole of reality. Every chemical reaction that becomes possible under given circumstances is realised. Every living creature struggles to survive and prosper. Every human being yearns for meaning, orientation, belonging, participation and ultimate fulfilment.

Reality, as we know it, is a relentless struggle against futility, suffering and death, even though it ends in futility, suffering and death. It runs against a barrage of fateful causal networks. It may be tragic to its core, but that is the reality we have, and of which we are a part. There is no other.

Once again, God's vision functions like a shifting horizon that constantly reveals new deficiencies and opens up new vistas, challenges and opportunities. It alerts us, involves us, enlightens us, empowers us and motivates us. This is the way God acts creatively and redemptively within a reality that is in flux. A reality in flux has not arrived. It is still on its way. It has not reached perfection and cannot reach perfection. But it is amenable to transformation.

What is being lost and what is being gained when we drop the apocalyptic expectation of a catastrophic end of the world and a new world without evil, depravity, suffering and death?

## Section II

### Human mortality and 'life beyond death'

The true human being is a human being that lives in intimate fellowship with God, becoming a representative and instrument of God's intentionality, sharing God's vision of comprehensive optimal well-being and therefore God's concern for any deficiency in well-being in any dimension of life, thus getting involved in God's creative and redemptive project in the world. In short, believers aspire to participate in the 'life of God' as far as it manifests itself in the reality we actually experience and as long as their lives last.

However, what about the time after life has come to its natural end? Does our relationship with God determine our status in the eyes of God, and our function in God's project, while we live on this earth and nothing more? Or does God's suffering and transforming acceptance of our feeble, fallible, vulnerable and mortal nature imply that we can hope for a real future *beyond our deaths*?

Will we physically rise from the dead, though with bodies transformed into something other than they are now, or have believers allowed their enthusiasm for an authentic life before God to overshoot the plain facts of human mortality?

It is important to realise that the assumption of a new life after death, if taken literally, is just as improbable as the assumption of a new creation without entropy, suffering and death after the existing world has reached its catastrophic end. If we are serious both with our faith assurances and with what we know as scientifically informed people, we must tackle this question head on.

### Difficulties with the concept of resurrection

Eternity, universality, harmony and omnipotence demand a condition without regularities and constraints. From a scientific point of view, such a claim, when taken literally, is an expression of irrational human desires gone wild. As I have argued again and again, such concepts are idealised abstractions from actually experienced reality that we have inherited from Platonic metaphysics. But neither a wished-for condition nor an abstraction is real.

Expressed in *scientific* terms, 'life after death' would mean a new kind of 'life' that is no longer subject to the constraints of time, space, energy and regularity. One cannot just remove time from the package and keep the rest. Where there is no time, there is no space, no energy and no regularity. In fact, it is difficult to imagine it as 'real' in any meaningful sense of the word.

Such a life, if it existed, would have to be able to be present anywhere and everywhere, which means that it could no longer move about. Without being bound to a location in space, will people who rise from the dead not lose their bodily concreteness, their particularity, thus their identity? Would they not lose their capacity to enter into relationships? And if so, what is the point?

Such a life would ‘simultaneously’ have to be present in the past, present and future, which means that it could not experience a progression from the past via the present to the future. Concepts like progress, intentionality, creativity and agency would no longer apply. If life is a structured and regulated process in time, does the concept of ‘life’ in ‘eternal life’ not lose its meaning?

Such a life would need no water, food or oxygen because its resources of energy would be unlimited. It would not be controlled by neurological and chemical processes; it would not be vulnerable to viruses and bacteria; it would not be capable of growing or ageing. Would the concept of the ‘body’ in the concept of ‘bodily resurrection’ not lose its meaning? Body is, after all, a highly structured, organised and positioned conglomeration of energy moving through space and time. It is constituted by multiple internal and external relationships. It presupposes the material and biological levels of emergence.

The biblical texts and subsequent doctrinal pronouncements do not make an appropriation of these assumptions any easier. There is a great variety of traditions that cannot be harmonised with each other: the ancient Israelite assumption that death was final; the post-exilic assumption that humans would rise from the dead to face judgment; the Platonic dualism between an immortal soul and a mortal body; the Pauline idea of the death of sinful human nature (the flesh) to make way for a new creation (the Spirit); resurrection upon the return of Christ at the end of time; being with the risen Christ immediately after death, and so on.

In later history, various traditions were combined into an awkward construct that became ‘orthodox’ doctrinal eschatology: At death, the ‘immortal soul’ would be separated from the mortal body. The body would decay in the grave. Depending on its degree of righteousness, the soul would undergo a painful cleansing process or go straight to heaven. Alternatively, it would just ‘sleep’ and wait for the last day. It would be reunited with its resurrected body upon the second coming of Christ at the end of times. It would face judgment and spend eternity either in heaven or hell. In traditional doctrinal eschatology, therefore, motives from different traditions—notably the Jewish concept of a resurrection to face judgment, the Platonic idea of the immortality of the soul, the Persian idea of a fiery pool in which all sources of evil would be annihilated, the apocalyptic expectation of a new creation—were jumbled together.

The eschatological constructs of doctrinal theology created doubt and fear rather than joyful certainty among countless believers throughout the centuries. Even today, some evangelists try to frighten their audiences into conversion with the question: ‘Do you want to spend eternity in the fires of hell?’ But how can you spend any amount of time in any place where there is no time?

It is *absolutely imperative* that we abandon assumptions that make no sense in scientific terms and that militate against the message of God’s suffering, transforming acceptance of the unacceptable as proclaimed and enacted by Christ, the messianic representative of God. The very truth of the gospel is at stake!

## Theological considerations

An unconstrained and unregulated condition is traditionally ascribed only to God. So does this mean that we become *divine* after our deaths? For some Christians (for instance in the Greek Orthodox tradition), this is what salvation in Christ actually means. Or does the Christian faith rather imply that we become truly *human* in this life while it lasts? That is the position I want to propose.

I became alert to the underlying problem when considering the fact that the ancient Israelite faith did not know about a life after death. If the latter were an indispensable part of the biblical faith, this would be extremely odd. The ancient Israelites were, after all, the most *original* believers in the biblical God. And they certainly had a very solid faith in God! Yet according to earlier texts, from Genesis 3:22 (the oldest) to Sirach 41:3-4 (the latest), immortality is explicitly denied to humans by the biblical God.

Why did that change so late in the history of post-exilic Judaism? Did God 'change his mind' at that juncture? Or was the truth about resurrection inexplicably hidden for hundreds of years and then suddenly revealed at that point in time? And if so, why that? There are no possible answers to these questions, because they are wrong questions to ask. What we have here is an evolutionary change in the basic assumptions of believers occasioned by changed circumstances and world views.

Let me remind you of the assumption that God, the transcendent Source and Destiny of reality, manifests God's intentionality *through* human insight. Human insight emerges and evolves in human history. The 'Word of God' has always been God's creative and redemptive response to actual depravities and predicaments.

If that is the case, we must follow a historical-critical approach to the Bible and seek to understand the changing circumstances to which these statements responded. Before we continue, therefore, let me offer a brief overview of the latter.

## Ancient Israel

The earliest biblical traditions (from the oldest biblical creation story, found in Genesis 2 and 3, up to Sirach 41, who wrote in the second last century BC) are remarkably realistic about the gratuitous beginning of life and the finality of death. The conception and birth of a child was a divine gift that could not be taken for granted. Similarly, a mature life that lasted into old age was a divine gift that would not last forever.

Where the biblical faith ventured to make statements about what might happen beyond death, it invariably did so for a reason. That reason was invariably the overwhelming concern of the biblical faith for divine righteousness and human authenticity, rather than the human desire for longevity. But that happened only towards the end of biblical history.

The oldest biblical creation narrative says that we have been taken from the earth and will return to the earth (Gen. 3:19). Access to the ‘tree of life’, that is, the possibility that humans could ‘live forever’, is explicitly denied (Gen. 3:22).

The stance of pre-exilic Israel on life and death is that, while you live, you have your chance to contribute to the ongoing life of your clan, tribe and nation. When you die, your progeny continues to take the latter forward, while you join your fathers in *Sheol*. *Sheol* is the place of death where you no longer see the light and cannot praise God (Isa. 26:14; Ps. 88:10 ff, 6:5 f; Job 14). A heap of bones is all that remains.

The obliteration of your life by death was as painful a prospect for Israel as it is for any other human community. God was the giver of life, so why should God want God’s people to die? One answer was that humans were sinners and that death was the result of God’s wrath (Ps. 90:7-12). This might be true for ‘spiritual death’, but it is demonstrably not true for biological death. All living creatures die, including humans, whether sinful or righteous.

A more realistic answer was that death was a simple decree of God, thus an inescapable fate. Sirach encourages us not to be upset about this fact because you cannot do anything about it and, in any case, ‘there are no questions asked in *Hades*!’ (Sir. 41:3-4). This stance is in line with the experiential realist approach we have been following. There simply is no life without death. The ‘divine decree’ is an anthropomorphic metaphor for God’s creative intentionality as the Source of actually experienced reality.

## Theodicy as the Root of Eschatology

In late post-exilic times, the problem of theodicy became pressing. Theodicy means the ‘justification of God’. Why was God in need of justification? Because it was not clear why the righteous (law-abiding Jews) had to suffer, while the unrighteous (the pagan oppressors) prospered.

Harking back to similar notions among other nations, for instance, the ancient Egyptians, faith in the justice of Yahweh led to the assertion that humans will rise from the dead to face God’s judgment. Assuming that God was the giver of life, death could not thwart God’s purposes.

The point of this message was that humans will not be able to leave their responsibility for their thoughts, words and deeds behind when passing through the barrier of death. Evil-doers would not escape punishment and the righteous would not forfeit their reward. The message of a resurrection from the dead was not based on the experience of reality, therefore, but on the proclamation of God’s incorruptible justice, asserted in the face of contrary experience.

The first canonical instance of a judgment after death is found in Daniel 12:1-4, which is usually dated between 168 and 164 BC. Note that the promised reward is to be granted to persons for their wisdom and leading others to righteousness! It consists of shining like the sun and the stars ‘forever’.

Note also that the threatened punishment does not consist of an eternity spent in the fires of hell, but of ‘everlasting shame and contempt’. Both are a reflection of what ought to happen while we are alive, responding to the experience of what ought not to happen.

Wisdom of Solomon seems to have made the first attempt to offer a robust argument in support of resurrection (chapters 1-3). It was written later than Sirach, perhaps in the first century BC.

God had created all things, the author argues, so that they might exist; God did not create death! (1:13-14). I would have thought that his implies that all creatures do *not* die, rather than

that humans will rise from the dead. But the author argues that God created humans in 'the image of his own eternity' (2:23). 'Righteousness is immortal' (1:15). It is human sin, thus God's wrath, or the devil, that brought death upon humankind. We should not 'invite death' through our behaviour (1:12). For a premature death caused by foolish acts, this may be true, but what about the death of the righteous? What about the death of animals?

Note that according to this text, it is the *image of God* that is immortal. It is *righteousness* that is immortal! The author argues that, if it were indeed God's wrath against sin that caused death, righteousness would prevent death from obliterating the human being created in the image of God.

Those who denied that possibility did so merely to get a free ticket to sin, an argument mirrored in 1 Cor. 15:32. In view of the ethical rigour of Sirach, against whom the author of Wisdom of Solomon may have formulated his argument, this insinuation is hardly justified. Moreover, if you are righteous just to earn a reward or to escape punishment, this stance can hardly claim to be genuine righteousness!

## The Age to Come

Another root of the concept of resurrection was the apocalyptic expectation that God would create a completely new reality without depravity, suffering and death. By implication those who had already suffered death would rise again. The apocalyptic tradition radicalized earlier prophecies envisaging a redemptive intervention of God *within* ongoing history. It responded to the desperation caused by situations of severe suffering and affliction. We have dealt with that in the last section.

In New Testament times, these motifs had merged with the messianic tradition and the expectation of the Kingdom of God. According to the Gospels, both John the Baptist and Jesus proclaimed the imminence of the 'Kingdom of God'.

After the death of both leaders, the early Christian community eagerly anticipated the speedy return of Christ, who would judge humankind and set up the Kingdom of God to replace the existing world of sin, evil, suffering and death. But as in Judaism, it was deemed sin and righteousness in *this* life that would determine one's fate in the last judgment. Let us go into some detail.

## Paul's Position

Paul follows the Jewish, rather than the Platonic tradition. He does not contrast transient, useless, or evil matter, on the one hand (including our bodies), with an eternal, precious and perfect idea, on the other (including our immortal souls).

For him, 'flesh' is the whole human being (body and soul) alienated from God, the giver of authentic life. For this reason, it is frail, corrupt and vulnerable to temptation, suffering and death. 'Spirit' is the whole human being (body and soul) empowered by the Spirit of God, and therefore vibrant, committed and righteous. According to Paul, it is the 'flesh' (= sinful human existence) that has to die, so that the 'Spirit' (= righteous human existence) can take over (Rom. 6:7).

Jesus entered the sphere of 'sinful flesh', died to the 'flesh', and rose into the 'Spirit', that is, into authentic existence in communion with God (Rom. 6:9 f; 8:3 ff;

2 Cor. 5:21; Rom. 1:3 f). Through faith, ritually expressed in baptism, we identify with the death and resurrection of Christ, and in this way, participate in the transition from ‘flesh’ to ‘Spirit’ (Rom. 6).

We receive the Spirit already now as first fruits of the life to come. As a result, we know neither Christ nor believers in Christ ‘according to the flesh’, but only as the ‘new creation’ that comes about through reconciliation with God (2 Cor. 5:16-21).

Placed into an apocalyptic frame of reference, this can only be considered a provisional measure. It is when the ‘present age’ comes to an end and the ‘age to come’ commences, or when we have left the ‘present age’ at our deaths and are ‘with the Lord’, who rose into the future of God, that we will be transformed from a ‘natural’ body into a ‘spiritual body’ (1 Cor. 15:35 ff).

Paul is adamant that the denial of the resurrection would render faith in Christ meaningless (1 Cor. 15:12 ff). That is certainly true. But in which sense is it true? There is no question that, operating within an apocalyptic frame of reference, Paul expected a new and ideal reality when Christ returned in glory (1 Thess. 4:13 ff; 1 Cor. 15:23 ff), or after death (Phil. 1:21-23; 2 Cor. 5:1-10).

However, as we have seen, the apocalyptic framework proved not to be viable as a form of Christian hope even in New Testament times. So how should we interpret ‘resurrection’, when the apocalyptic world view has lost its plausibility? Paul’s valid contention should not intimidate us into submission to a literal interpretation of the apocalyptic frame of reference! The latter had already been problematic in biblical times.

As 1 Corinthians 15 shows, the problems believers had with bodily resurrection surfaced among Hellenistic Christians in Paul’s time and he had to find plausible explanations. He was not all that successful in doing so.

The metaphors Paul used in 1 Corinthians 15:35-41 are not really applicable, because there is a clean ontological break between ‘this world’ and ‘the age to come’, which is not the case between seed and plant, human flesh and animal flesh, earthly and stellar bodies, light of the sun, the moon and the stars.

So what could resurrection mean? Paul explicitly excludes the resuscitation of decayed bodies: ‘. . . flesh and blood cannot inherit the Kingdom of God, nor does the perishable inherit the imperishable’ (1 Cor. 15:50). He also rejects the Platonic dualism between body and spirit. The new life will be *bodily* life. A soul without a body is unthinkable for the biblical faith.

Needless to say, both these propositions are also untenable in terms of scientific insight. So we either reconceptualise the thrust of Paul’s message in forms that make sense in terms of current insight or we have to abandon it altogether.

## Romans 8

When pressed to explain what he meant, Paul made it clear that it is not a physical body, but a ‘spiritual body’ that will emerge from what is sown (1 Cor. 15:44). But what is a ‘spiritual body’ in terms of Paul’s concepts of ‘flesh’ and ‘spirit’? Paul’s argument in Romans 8 may help us detect the intention lying behind his statements about death and resurrection.

The point of departure is the Old Testament certainties that God demands righteousness, that this righteousness is expressed in the law of Moses, and that sin will lead to the curse of God (‘death’) and righteousness to the blessing of God (‘life’). This is spelt out in frightening detail in Deuteronomy 28 and 30:15-20.

The Old Testament assumption that God punishes sin with death and righteousness with the fullness of life, led to a usage of the concepts of death and life as metaphors for sin and righteousness. With the apocalyptic tradition, Paul reified these metaphors and identified them with the death and resurrection of Christ.

The core of Paul's contentions in the Letter to the Romans is that we cannot achieve the righteousness intended by God by fulfilling the stipulations of the law on the strength of our own spiritual and moral resources. These are inherently deficient and powerless (= the 'sinful flesh'). The argument is this: We are righteous (we live) when we participate in the life of the risen Christ; we remain in sin (in death) when we try to fulfil the law on the basis of our own moral resources.

Expressed in different words, we cannot create our own authenticity without God's creative and redemptive action. Righteousness is the divine gift of a new spirit, the Spirit of Christ (which is the Spirit of God determining the human spirit), thus a new life. This gift is accepted in faith and activated in love (Gal. 5:6).

Because the apocalyptic transition from the 'present age' to the 'age to come' has not yet happened, participation in the life of the risen Christ is provisional and awaits full realisation. The Spirit is only a 'first instalment' of what is to come. In the eschatological future, however, we will become what Christ has already become by passing through the death of this life into a reconstituted life through resurrection.

### The Liberation of Creation

Paul suggests in Romans 8:19-25 that the 'creation' looks forward to the 'revelation of the children of God', because the 'creation' too will be liberated from the bondage to futility and decay. This suggestion is entirely consistent, when viewed against the background of the apocalyptic expectation that the whole of reality will be transformed. The problem is that the apocalyptic worldview is no longer tenable.

Today we know that biological death is not the 'enemy' of God that will finally be overcome (1 Cor. 15:26). On the contrary, death is necessary for the very existence and operation of biological life, which God created and continues to create. What makes us think that we should be immune against the inevitability of death to which all living creatures are subject?

If the assumption of an ontological reconstruction of the cosmos as a whole can no longer work for us, we have to dig up the underlying intention of Paul's position and reconceptualise it in terms of current insight. It is the 'death' of *inauthentic* human life that is the enemy and that must be overcome. We must put on the new authentic life of Christ instead (Rom. 6).

For us, the message of the text about the 'creation' is that non-human creatures are loved by God as much as we are. In fact, our agonies are part of its agonies. Participating in God's creative and redemptive intentionality, we can indeed try to overcome unnecessary suffering and premature death. We can indeed give other living beings the dignity and respect they deserve as creatures of God. We can give them the chance to live and to flourish. But we cannot aspire to a life that is not subject to time, space and power constraints—whether for us or for other creatures.

### The Ongoing Pauline Tradition

The Christian faith is persuaded that our lack of authenticity cannot be overcome through mobilising our own moral resources and fulfilling an ethical code of law. It can only be overcome through participating in the authentic life of Christ, accessible through the Spirit and freely granted by God. That is the invaluable legacy we have inherited from Paul.

It is not necessary to translate the *spiritual* process that Paul refers to into the expectation of a *quasi-biological* transformation of the body, as suggested by apocalyptic eschatology. Paul provides an absolutely adequate alternative: in faith we 'die with Christ to the flesh' (human life apart from God) and 'rise into the new life of Christ' (human life in fellowship with God).

Because this is the case, we should not be surprised that, when the expectations of an imminent transition from this age to a new age did not materialise as expected, the motifs of eternal judgment, the Kingdom of God and Christ as the messianic Son of Man shifted from the outstanding *eschatological future* (1 Cor. 15:22-28) to the *transcendent space* of the

‘heavenly places’ (Eph. 1:20; 2:6, etc.). Remember that these are alternative projections of what ought to be and could substitute for each other!

According to the Deutero-Pauline letters (Ephesians and Colossians), Christ was *already* enthroned in heaven above all spiritual powers that rule the world. Believers had *already* joined him in this exalted position (Eph. 2:4-6; Col. 3:1-3). Eternal life is acquired by accepting to be accepted, or forfeited by refusing to be accepted, into the new life of Christ here and now (Rom. 6:1-14; Eph. 2:4-6; Col. 3:1-4).

## John’s Position

In John’s Gospel too, ‘eternal life’ means authentic life, rather than endless life. The ‘last judgment’ takes place wherever people take a decision for or against faith in Christ (John 3:18, 36, 5:24, 12:48). Rejection of Christ signifies judgment, condemnation and death already now, even if you continue to live (John 3:18, 5:24, 15:6). Participating in the new life of Christ, believers have eternal life even though they die (John 11:25).

Christ represents and manifests the divine Spirit, and those who believe in him share this Spirit (John 6:63, 7:37-39). Christ lives in communion with the Father, which means he is present in the Spirit, so that believers can join his new life in the Spirit (John 14:18 ff). Believers are to remain ‘in Christ’, as Christ is ‘in the Father’ (John 15:1-11). Conversely, the Father is in Christ, and Christ is in his followers (John 14:8-16).

For John, all this means nothing other than participating in the redeeming love of God as manifest in Christ (John 15:9-13; 1 John 4:7-21). ‘Eternal life’ in John thus means authentic life, which again means sharing in the self-giving love of God as manifest in Christ. The historical manifestations of such love may come to an end, but love as such will remain ‘eternally’ (John 11:25 f). Paul agrees with this contention (1 Cor. 13:8-13; Rom. 8:31-39).

So, on the one hand, continuing biological life was deemed the *consequence* of authentic life in the biblical tradition. It was the reward for righteousness. In its original version, this gift did not extend beyond death. On the other hand, biological life served as a *metaphor* for authentic life. In late Judaism, this metaphor acquired a quasi-biological interpretation. Authentic life was then expressed in terms of a life without death, since the cause of death (sin) had been removed.

It is clear, however, that the concept of ‘eternal’ life in the New Testament does not refer to Platonic timelessness, or to the endless continuation of biological life, but to a life in unobstructed fellowship with God lived here and now. The crude biological terminology of the time should not detract from the fact that, in the mainstream of both Judaism and Christianity, resurrection and eternal life were essentially about *authenticity*, rather than longevity.

We gather from this overview that a literal, quasi-biological, or ontological interpretation of the ‘resurrection of the body’ is out of place even in biblical terms. Similar to its cosmological counterpart (the apocalyptic transition of the world from this age to the age to come), the expectation of bodily resurrection emerged and evolved in human history in response to particular social and existential needs and their particular world view interpretations.

In line with the apocalyptic visions of the age to come, it was cast in metaphorical language such as 'sleeping', 'awakening' and 'rising'. It underwent qualifications in various directions. But it always had redemptive intentions—the warning against irresponsibility and the reassurance of divine acceptance and belonging. The 'last judgment' always referred to the acceptability of our human conduct while alive on this earth (Mt. 25:31-46).

What God can make of such a life after its termination is a different matter, a matter that goes beyond our observation, comprehension, imagination and responsibility. For believers, it should also be irrelevant. If you have been with God in this life, sharing God's creative and benevolent intentionality as manifest in Christ, you will be with God in whatever future may come next, just as the crucified Christ is with God.

### Section III

## Facing the fact of our mortality

It would seem, then, that both on scientific and theological grounds, we have to sober up and face the facts of our limitations as creatures of God, on the one hand, and our dignity as representatives of God, on the other. Science can help us in doing so.

In *scientific* terms, the resurrection of a deceased and decomposed body makes no sense. Every carcass disintegrates when death sets in. Its mineral constituents are recycled over and over again. Because it is the body that constitutes our existence in this world, we perish together with it. Because its intricate organisation cannot survive death, there can be no continuity between our present life and an assumed alternative life that would no longer be subject to death, even if there were such a possibility.

In *theological* terms, we need to understand that according to the Bible, biological death will not be overcome. No biologically based life can attain immortality. Only God's life is eternal. That is as clear in the New Testament as it is in the Old Testament (1 Tim. 6:16; Jas. 4:13 ff). Even according to apocalyptic eschatology we all have to die or undergo radical transformation. What can be overcome is the alienation that sin causes between God and us and between us and other humans and the rest of God's creation.

To the extent that the alienation between God and us is overcome, we can indeed *participate* in the 'life of God'. *For us* here on earth, the 'life of God' is characterised by creative power and redeeming love, rather than by timelessness, perfection and immutability. Whatever God's life may be 'in itself' lies beyond our observation, comprehension and imagination.

*For us*, the 'life of God' is only manifest in our experience of God's creative power, on the one hand, and the proclamation of God's benevolent intentionality, on the other. We actually experience only these two manifestations of 'God's life'. And we experience them by *participating* in them.

## **‘Eternal life’ is God’s life**

God’s life has traditionally been conceptualised as ‘eternal’ life. But it is not always very clear what the word ‘eternal’ actually means. The concept of eternity lends itself to endless speculations.

It could be something that endures beyond our lifetimes; something that includes, but goes beyond time as such; something that ‘vertically’ transcends time; a reality without time; ‘timefulness’ where God has simultaneous access to past, present and future; never-ending time; the constancy of the present moment; transcendence; heavenly glory; existential authenticity—you name it!

The biblical meaning is fairly straight forward. It is experiential, rather than speculative. The Hebrew concept that we translate as ‘eternal’ (*ad olam*) means ‘all the time’, from beginning to end. God is ‘always’ there for us, for every believer, every generation, every epoch, ‘until the end of the age’. An age has a beginning, a duration and an end. The Israelites knew that, and science confirms it.

Expressed in simple terms, God is present for us in God’s creative power and God’s benevolent intentionality. That is what ‘God’s life’ means *for us*. We have no knowledge of the ‘life of God’ beyond what we actually experience. The point is that believers are privileged to participate in *this* life of God through faith. When we are in fellowship with God, we share God’s life—his presence, his power, his vision, his love. But it is *God’s* life that we are sharing.

We can only share the life of God within the constraints of time, space, energy and regularity that characterise our lives. On our own, we can only live in the present, and our present only lasts as long as we have a future that can change into past. When we run out of future, we will leave the scene, while the drama of God’s life continues without us. All we can hope and strive for is that our limited lives become authentic parts of God’s life in the eyes of God.

Taken on their own, our own lives do not even have the capacity to become *authentic* lives. Authentic life is life in communion with God. We can only share God’s life. We can only receive it and accept it as a gift of God. When we do that, however, we no longer have to worry about what might happen after our deaths. Having been forgiven our waywardness, we do not have to fear the last judgment. Being embedded in a greater whole, our lives cannot ever be lost.

## **The miracle of our existence within historical time**

We began our description of the ‘real’ human being in chapter 8 with the observation that, as a biological creature, humans emerge, evolve, persist for a time, then deteriorate and decay. The question is what we believers make of this simple and incontrovertible fact of life. Science can bolster the amazement, gratitude and joy that faith can and should impart and seldom does. Although we are not immortal, our mortal lives are glorious!

If God is the *Source* of reality, 'God's life' must certainly include the entire sweep of cosmic history from beginning to end. Our own lives are embedded in this vast stretch of time. For close on 14 billion years, we did not exist, although the potential for us to come into existence slowly emerged and evolved until we were conceived and born.

Similarly, there will come a time when we will cease to exist, but the consequences of our lives will continue at least up to the end of life on planet earth. That is quite a frightening prospect. If God is the *Destiny* of reality, the question is whether our lives will have been in line with God's vision of comprehensive optimal well-being or not.

In experiential terms, human life emerges from the 'life of God', as it were. It is sustained within the 'life of God'. And it reemerges into the 'life of God'. It is precisely as a temporary and local representative of God's creative and redemptive intentionality that the particular human existence of Jesus of Nazareth possessed and possesses divine authority, unsurpassable dignity and irreplaceable significance. And the same can be true for us.

## Reflecting on our beginning

The probability of any one of us having come into existence was virtually nil. In view of the miraculous fine tuning of the parameters guiding the cosmic process, neither the universe as a whole, nor the solar system, nor the earth, nor life on earth, nor the human species, *had* to come to exist—let alone you and me as minute parts of this unimaginable large and complex whole.

Just think of it: *Homo sapiens* may have gone through something like 8000 generations over the last 200,000 years. Counting only twenty generations backward, we each have had more than 2 million ancestors. For anybody to have come into existence, all of these ancestors must have copulated precisely with *that* particular spouse. In every successive conception, it had to be precisely *that* particular sperm cell that reached *that* particular egg cell in competition with about 250 million others of its kind. Moreover, all these ancestors had to be healthy and wealthy enough to bring up their children in spite of much higher mortality rates than we have now. Just think of the havoc caused over all these millennia by wild animals, diseases, famine, natural catastrophes, raids by marauding neighbours, conflict and war.

In short, that we exist at all is an astounding miracle. We have received our lives as an unexpected and undeserved gift of grace. Not to recognise that fact is one of the follies we all seem to engage in. We take ourselves for granted. We move through life ever grumpy, ever dissatisfied with our lot, ever groping for better and for more, ever complaining, groaning and moaning about some trivial inconvenience, constantly striving for some trivial enhancements.

We also do not normally contemplate the inescapable fact that we are heading for the end of our lives and that it will meet us within a few short decades, years, or days. Contemplating our inexorably approaching deaths, we can begin by realising that *just having lived at all* is an unsurpassable gift and privilege.

The Bible is surprisingly realistic in its observation that all things had a gratuitous beginning and will come to an end in some way or another. Nothing whatsoever *had* to come into existence; nothing whatsoever *has* to last forever. That includes the life of every human being and all its aspects.

Even Jesus of Nazareth, whom the Christian faith recognises as the messianic representative of God on earth, was born, grew up, lived as an adult, suffered and died; otherwise, he would not have been a real human being.

Yet the fact that we are derived, dependent, vulnerable and mortal creatures does not undermine our dignity as human beings. To fully embrace the fact of our dependence on a higher origin and our accountability to a higher authority was considered profound wisdom in biblical times; to ignore it was considered folly.

However, every human being has been ‘created in the image of God’ (Gen. 1:26 ff), that is, a potential representative of God on earth. Christians believe that Christ is the authentic version of this image (2 Cor. 4:4), in whose life we are invited to participate and into whose image we are to be transformed (2 Cor. 3:18).

## Contemplating our end

Death is not an indication that God has rejected us, as believers tended to assume in biblical times. It is also not an indication that God has failed us. It is also not an indication that our lives have been worthless trash, rather than infinitely precious and loved by God. But the *quality* of our lived lives is indeed a serious issue.

The actual life of a particular consciousness, complete with its vast set of antecedents and its vast set of consequences, can never disappear from the record of cosmic history, which is where God’s creative and redemptive intentionality actually manifests itself. So our lives can also never lose their importance as part of the cosmic process as a whole.

The question is what our contribution to the whole has been. Each individual human consciousness is the product of God’s creative intentionality that is being lured into God’s redemptive project. Having become part of God’s project, it can never lose its unique significance, even after this active participation has come to its natural end.

Because it is authenticity rather than longevity that matters, those who have linked up with God’s benevolent intentionality and agency will be able to die in peace, entrusting their lives to the very God from whom they have received it and trust that whatever God may do with it will be in line with God’s redeeming love.

On the other hand, if we fail to become part of God’s redemptive project, this is an *irretrievable loss*, not only for us, for our community, society and our natural environment, but for God. This is what the biblical concept of the ‘last judgment’ is meant to express.

## The last judgment

The 'last judgment' always refers to what we have been and what we have done in *this* life, never to what we could become and achieve after our deaths. According to the Bible and many other religious convictions, the idea of life after death is based on the necessity of a final assessment of a life lived on earth.

Such an assessment presupposes criteria of what ought to be. Where life is oriented towards a vision, there are secondary goals, values, criteria of acceptability and norms of conduct. The criteria to be applied in the assessment of a life lived now were derived by the early church from the new life of Christ in communion with God, rather than a meticulous observation of the stipulations of the Mosaic law. It is highly significant that in the New Testament, Jesus Christ, the messianic representative of God, was deemed the judge of the last judgment and that the criteria of his judgment were derived from our participation in his love for those in need (Matt. 25:31-46; Rom. 13:8-10).

It is the degree of correspondence of a human life with the creative and redemptive intentionality of God, manifest in the world process as a whole, articulated in the history of Israel and culminating in the Christ event, that determines its quality and acceptability. Were we part of God's creative and redemptive project? Have we shared God's vision of comprehensive optimal well-being? Were we concerned about the deficiencies in well-being that we encountered on our way through life? It is not often recognized that this was the most basic motif behind statements about life after death in the biblical tradition.

In the Old Testament, individuals deemed themselves blessed when they were granted a long, healthy life. Seeing their progeny flourish, they could depart in peace. What mattered was the future of their clan, tribe, or nation. In the New Testament, believers are absorbed into 'Christ', a new kind of humanity which is trans-individualistic. Believers become part of the 'Body of Christ'.

Contemplating our deaths, therefore, we should be concerned about the future of those that live alongside us, those that will survive us, our communities, societies, future generations, humanity as a whole and the natural world, rather than our own longevity beyond our deaths.

## The fundamental motivation of faith in Christ

Falling back on the meaning of the cross of Christ, we can and must go an important step further. The cross is, after all, the core of the New Testament message. The cross is a prototypical enactment of God's sacrificial love. The resurrection of Jesus is the divine confirmation of the validity of the claim, proclamation and enactment of the redeeming love of God by Jesus that brought him to the cross.

Concern about the healthy continuation of our lives may very well be programmed into our brains by evolution. However, the expectation of an *infinite* prolongation of our individual conscious lives is out of character with the kind of intentionality that manifested itself in the cross of Christ in which we are invited to participate.

Jesus certainly did not *throw away* his life as useless trash to be dispensed with. As the Gospels have it, he struggled with God for its maintenance, just as Old Testament believers struggled with God when faced with mortal danger. But in the end, he was willing to expose his life to the hostility of his enemies.

So he was prepared to *give his life* to the divine purpose he had proclaimed and enacted. This intentionality is not reversed, but affirmed by the notion of the elevation of the ‘crucified Christ’ to the status of a new humanity in which we are allowed to participate. The new life of Christ is a life that acts sacrificially and redemptively in the authority of God.

1 Timothy 6:6-11 says that ‘we brought nothing into the world and we shall take nothing out’. This is said about material possessions. But it is also true for our biological bodies. It is also true for whatever we have accomplished and meant in this world. It will all stay here when we go. But that is no reason to deprecate what happened in this life. The ‘great gain’ is godliness and contentment, the text says. Godliness is participation in the creative and redemptive project of God.

Contentment means taking only what one needs to sustain oneself and what is necessary to accomplish one’s task in this world. In contrast, greed is trying to amass as much as possible for private pleasure, power and glory. This would be ‘stealing from God’, as it were, ‘playing God’ as if we were the sovereign masters, owners and beneficiaries of our life worlds. However, the stage on which godliness, contentment, or greed are acted out is *this* world, rather than some alternative space and time.

Against this background, to expect never-ending life for oneself may be considered a sign of gullibility that craves for more than a creature is entitled to expect and will ever get. It can also be considered a lack of willingness to yield one’s life to God’s purposes. To accept the necessity and inevitability of death can be considered a sign of joining the creative, redemptive and sacrificial love of God as it actually manifests itself in the reality we experience.

What will God do with a life once lived? We do not know and do not need to know. We have been reassured that this is a God of creative and power and redeeming love. But we cannot penetrate the transcendent as such. Having been part of the ‘life of God’, as it manifests itself in the reality we do know, we can entrust our lives to this God and die in peace.

### **Reader reaction**

A colleague of mine told me that, if valid, my interpretation would demolish all hope in the future for us. Do you agree?

Which aspects of my interpretation did you find liberating and which did you find unacceptable?

How would you summarise my position and your response for a high school student?

## Let us summarise

In the first section, we dealt with the challenge that current scientific insights, particularly the law of entropy and the necessity of death for life, pose to conventional Christian eschatology. It would seem that the transformation of the ambiguous world we experience into an eschatological 'Kingdom of God' void of all imperfections, waywardness, suffering and death is not likely to materialise. Contemporary theological attempts to salvage eschatology do not necessarily seem convincing.

This insight forces us to reflect on the intention of eschatological statements found in the Bible. In the first place, they were not meant to represent scientific predictions, but warnings and reassurances in concrete situations. In the second place, God does not only speak through prophetic visions, but also through the way God's creation actually functions. Science has provided us with a deeper insight into reality than could have been available to the authors of the Bible.

A study of the biblical documents reveals that for most of its history, the future expectations of the biblical faith were more down to earth than conventional Christian eschatology seems to suggest. On the whole, these ancient believers hoped for a transformation of aspects of this world within the foreseeable historical future, rather than a completely new creation beyond space and time. Most of these expectations were abandoned or reinterpreted when they no longer seemed to be relevant in their original form.

Apocalyptic announcements of an imminent transformation of this world into a perfect reality were radicalised visions of what ought to be, written to encourage believers in unbearable situations, rather than something akin to religious oracles or scientific predictions. To indicate that God could act in unpredictable ways, their authors deliberately used weird symbols and metaphors that suggested totally improbable, if not impossible, outcomes.

Within biblical history, apocalyptic eschatology appeared very late on the scene and remained controversial in Judaism. While early Christianity took it for granted, later authors such as the Deutero-Paulines and John adapted it to a new situation, when the return of Christ did not materialise as expected. There is no reason, therefore, why theology should feel obliged to stick to an eschatology based on apocalyptic imagery, rather than re-conceptualise the actual thrust behind biblical statements concerning the future.

I suggested we formulate the latter as God's vision of comprehensive optimal well-being that translates into a concern to overcome any deficiency in well-being in any dimension of life and that involves us in God's creative and redemptive action in the world. This vision resembles a horizon that moves on as we approach it, opening up ever new vistas, challenges and opportunities.

In Section II, we tried to understand what 'resurrection from the dead' could mean in terms of experiential realism. Modern scientific insight excludes a literal, quasi-biological interpretation. The Platonic idea of an immortal soul that will be released from the mortal body is no longer tenable, nor is it in line with the biblical Scriptures.

The biblical tradition is amazingly realistic concerning the limited duration of human life and the inevitability of death. Ancient Israel did not know about a life after death. The proposition that we would rise to face judgment emerged late in post-exilic Judaism. It was based on faith in the incorruptible justice of God in the face of glaring experiences to the contrary. It was underpinned by the apocalyptic world view that posited a demolition of this world and its reconstruction in an ‘age to come’.

Early Christianity was steeped in this world view. However, as in the case of the apocalyptic announcement of a reconstruction of the universe, the failure of the expectation that Christ would soon return in glory and establish the Kingdom of God, led to a re-conceptualisation of the message that focused on spiritual, rather than physical transformation.

It would appear, then, that the core of the message of ‘resurrection from the dead’ is human authenticity, rather than human longevity. Humans cannot possess immortality; they can only participate in the ‘life of God’. For us, God’s life is manifest in God’s creative power, as explored by the sciences, and God’s redemptive intentionality, as proclaimed by faith.

Our existence has emerged from God’s ongoing creative activity, is sustained by God’s ongoing creative activity, and will re-merge into God’s creative activity. What matters is whether, and to which extent, we have become part of God’s creative and redemptive intentionality during our limited lifetimes.

For us, ‘eternal life’ can only mean authentic life. That is a life in fellowship with God, sharing God’s vision of comprehensive well-being and God’s concern to overcome all deficiencies in well-being, and participating in God’s redemptive project in the world. If we have lived in fellowship with God, we can fearlessly and joyfully hand back our lives to God who has once entrusted it to us.

# Glossary

## A

- abstraction—a concept that indicates common characteristics among divergent entities and ignores the differences between them, for instance, a flower, a chair, a human being.
- acceptability—the quality of satisfying valid expectations.
- accountability—being responsible to a higher authority.
- Adonai—Hebrew for ‘Lord’.
- aesthetic—concerning a sense of beauty.
- agency—the capacity to act.
- aion—Greek for a period of time or an ‘age’.
- animism—a world view assuming that reality is determined by uncanny forces with a personal will and agency.
- anomie—a mental state that has lost its structure and direction.
- anthropology—study of human nature; study of human cultures.
- anthropomorphic—describing non-personal entities as if they had personal characteristics.
- Apocrypha—ancient documents considered significant but not included in the biblical Canon.
- apologetics—a theological discipline that tries to show that traditional assumptions are compatible with contemporary insights.
- archetype—a symbol, model, assumption or pattern of behaviour believed to be ingrained in human consciousness.
- attractor state—a state of the brain that tends to determine the interpretation of ongoing experiences.
- authentic—quality of being what something ought to be.

## B

- biblical history—the time between roughly 1000 BC and AD 200 when the biblical documents were written down and compiled.
- biblical tradition—the body of faith assumptions that emerged and evolved during biblical history.
- big bang—the assumed event that triggered the process of cosmic evolution.
- body and soul—the relation between the biological and the spiritual aspects of human reality.

## C

- causality—a sequence of events necessarily following upon each other.
- central nervous system—the nervous system controlled by the brain.
- chance—the happening of an event without discernable causal antecedents.
- Christology—the body of doctrines concerning the person of Christ.

- closed universe—the assumption that immanent reality is all there is, that there is no source or destiny beyond the reality we actually experience.
- cognitive dissonance—a state of consciousness in which major contradictions between assumptions and observations cannot be resolved.
- collective consciousness—the way a greater number of people experience and interpret reality in more or less the same way.
- collective interests—needs and wants pursued by a group of people.
- commerce—the aspect of society dealing with trade in pursuit of need fulfilment, profit and wealth.
- complementarity—the capacity of two different entities to make up for each other's insufficiencies.
- complexity—a condition characterised by highly involved relationships.
- comprehensive optimal well-being—a vision of the most balanced realisation of the potentials of all participants, aspects, or entities that can materialise under a particular set of circumstances.
- consumer culture—a body of ingrained attitudes and behaviour geared to constant increases in material consumption and sensual pleasure.
- contingency—a situation where potential events are not predetermined but open to unpredictable change or spontaneous decision-making.
- continuous creation—the view that God did not create the world once and for all at the beginning of time, but that unfolding reality manifests God's ongoing creative activity.
- contradiction—two statements opposed to each other.
- conviction—a firm belief.
- cooperate—work together.
- cosmology—the science of studying the beginning, characteristics and functioning of the universe as a whole.
- covenant—the formalised mutual commitment believed to exist between Yahweh and Israel.
- creation—the assumption that reality came into being through a creative act of God.
- creativity—the capacity of bringing about something new.
- credibility—the capacity of making sense to a critical audience.

## D

- Darwinism—the theory developed by Charles Darwin that biological evolution is based on chance mutations, which allow some of the organisms to survive better in particular environments.
- deduction—the act of drawing out the implications of basic assumptions or established facts.
- Deism—the idea that God created the world and then withdrew to let it function on its own.
- derivation—having an origin in something else.
- Destiny of reality—the authority determining what reality ought to become, leading to a sense of meaning and purpose.

- determinism—the view that events have to happen because they are the consequences of prior events, natural laws, or divine decrees.
- Deuteronomy—the fifth book in the Bible.
- dialectic—the validity of two seemingly contradictory statements.
- discrepancy—a difference or divergence that should not exist.
- downward causation—the impact of a higher level of emergence on the behaviour of a lower level.
- dynamism—a world view assuming that reality is determined by the flow of impersonal forces that can be manipulated through ritual or sorcery.

## E

- emergence—coming into being from something that existed before.
- empirical—making an impact on sense perception and its technical extensions.
- empiricism—the assumption that only what can be demonstrated or proved to have material existence should be considered real.
- encephalogram—a depiction of processes happening within the brain.
- endocrine system—the glands that secrete hormones into the bloodstream.
- energy—the power that is able to trigger and drive processes.
- entropic process—the tendency of processes to move from order to disorder, from potent energy to spent energy, and from concentration to dispersal.
- entropy—disorder, dissolution, disempowerment.
- epistemology—the science of human knowledge and understanding.
- eschatology—the body of doctrines dealing with the expected end of the world and a new world to come.
- eternity—a situation not subject to the normal flow of time.
- evil—anything that obstructs or hampers human life, survival and prosperity.
- evolution—the process by which reality unfolds into divergent entities.
- existential—concerned with the challenges and decisions of one's personal life.
- experiential realism—an approach that takes for real whatever has consequences in this world and that can be described, critiqued, impacted and transformed.
- exponential—moving in a process that goes faster and faster.

## F

- faith—trust in, and commitment to, somebody or something that cannot be shown to exist or happen.
- favela*—Brazilian word for 'slum' or informal settlement.
- feedback loop—a process whose outcome again impacts the beginning of another round of the process.
- field—the way magnetic-electrical forces organise themselves in space and time.
- fragmentation—breaking up into different parts.
- freeze or fry scenario—a projected future of the universe where energy either disperses indefinitely, leading to very low temperatures, or condenses into a single concentration, leading to extremely high temperatures.

frontal lobes—the front outer parts of the brain where rational thinking and decision-making takes place.

fundamentalism, fundamentalist—a stance that deems a literal interpretation of religious texts or doctrines as fundamental for faith and without possible error.

## G/H

glial cells—brain cells other than neurons that play a supporting role.

grounding—the assumption of a valid foundation of reality.

Hellenistic culture—the dominant culture around the Mediterranean, going back to the spread of the Greek world view after the conquests of Alexander the Great.

hidden God—the experience of the operation of power in the universe without apparent purpose or intention, yet attributed to the agency of a personal God.

high entropy energy—spent energy that can no longer ‘do work’.

Holy Spirit—God’s creative and redemptive intentionality structuring, orienting, motivating and empowering the human spirit.

homeostasis—the balance within the body upheld by chemicals which counteract disturbing influences from the outside.

hormones—fluids secreted by glands that determine functions in the body.

## I

idealisation—removing all imperfections from a particular concept.

idealism—an approach to reality that concentrates on ideas and ideals that are free from the imperfections of the concrete reality we experience.

identity—what makes a person or group unique.

immanence—whatever is accessible, in principle, to human observation, explanation and prediction.

image of God—title of the representative of God in Genesis 1.

immanent transcendence—aspects of immanent reality that are not immediately accessible to human experience, such as the past, the future, or the origin of the laws of nature.

impulse—an electrical signal that causes a process elsewhere in the system.

inference—the logical implication of an assumption.

information—the transfer of insights, structures, or procedures through symbolic representation.

infra-personal—belonging to a level of emergency below the personal level, e.g. the biological or physical level.

infrastructure—the material and organisational prerequisites for something to exist or happen.

integration—the meaningful amalgamation of disparate elements.

integrative transcendence—the method that accommodates all human experiences and scientific insights in a perspective from beyond immanent reality.

intentionality—personal orientation towards certain goals or visions.

itinerant—walking around.

## J/K

justification—declaring acceptable in terms of a valid code of law, value, norm, or vision.

*Kurios*—Greek for ‘Lord’.

## L

legitimation—proclaiming or claiming to be lawful or justifiable.

liberal—claiming freedom from unnecessary constraints.

life world—reality as far as it directly concerns a person or group.

limbic system—the part of the brain where emotions are located.

logos—a Greek concept meaning word, design, rationale, or wisdom.

low entropy energy—potent energy that can do work.

## M

macroscopic—concerning the level of reality that is immediately accessible to our senses or its extensions, such as iron or wood, as opposed to the hidden and more basic levels, such as protons and electrons.

materialism—a world view that accepts only physical matter to be real.

metaphor—a concept taken from the experience of concrete life and used to express something transcendent, intangible, or ineffable, for instance, you are the ‘salt of the earth’.

metaphysical—an approach that tries to determine the hidden foundations, principles and processes of reality.

metropolitan—pertaining to a central city, or the bishop of such a city, e.g. the Metropolitan of Constantinople.

mind—functioning consciousness.

modernity—the civilisation that emerged and evolved in Europe after the Middle Ages, characterised by the emancipation of individuals from all kinds of imposed authority.

mortal—doomed to die.

mutation—changes in the character and function of genes.

myth—a narrative using plants, animals, persons, objects and actions to express persistent experiences or valid truths.

## N

*Naherwartung*—German for the expectation that a drastic change of the situation is imminent, for instance the second coming of Christ.

narcissism—an attitude that is preoccupied with one’s own self.

natural law—regularities that seem to govern the emergence, evolution and operation of material reality.

naturalism—a world view according to which the reality we experience is all there is, thus closed in upon itself. There is no transcendent beyond.

neocortex—the part of the brain associated with reason and decision-making.

neural—pertaining to neurons (brain cells).

neuron (neurological)—brain cell that processes and transmits information through electrical impulses and chemical reactions.

neurotransmitter—chemical substance that conveys signals from one neuron to another across a synapse.

## O

obsolescence (obsolete)—the condition of being outdated.

Occam's razor—the principle of giving priority to the simplest explanation available that is capable of doing justice to what is to be explained.

open universe—a universe that is not closed in upon itself, but dependent on a transcendent Source and Destiny.

opportunity costs—the value of alternative products that could have been acquired with the sum spent on a product or service.

order of magnitude—a particular level of a series of numbers where each successive number is multiplied by ten to give the next one, e.g. 10-100-1000-10,000.

## P

panentheism—the view that the experienced world is contained within the greater reality of God.

pantheism—the view that reality as such is identical with God.

Parsism, Parsist (Persian)—the religion of ancient Persia, which assumed that the current ambiguous age will make way for an age where the forces of evil will be overcome and only the forces of good will survive.

particles—subatomic components of matter and radiation.

Pentateuch—the first five books of the Bible.

perspectival—an observation dependent on the angle from which you perceive it.

perspective—a particular angle from which you observe something.

phylogenetic memories—a knowledge ingrained in the genetic make-up of an organism, e.g. how weaver birds build their nests.

Platonism—an ancient Greek philosophy that holds that the timeless 'essence' of a phenomenon is more basic than its fleeting concrete appearance, or that the idea of something is more real than its material manifestations.

plausibility (plausible)—making good sense.

postmodernism—a group of philosophical schools that deem modernity obsolete and counterproductive.

postmodernity—the current popular mood that spurns lofty ideals, visions and commitments in favour of the immediate satisfaction of needs and desires.

prediction—a reasonably reliable anticipation of future developments.

pre-scientific world view—a view of reality that is not informed by modern science, thus not based on demonstrable fact, mathematical stringency, or plausible conjecture.

priestly source of the Pentateuch—the assumed latest of the sources that were used to compile the first five books of the Bible.

probability—the extent to which a process can be expected.

prototypical—pertaining to the characteristics of something that serves as a model for a whole series of subsequent phenomena.

provisional—pertaining to something that is not final.

## Q

qualia—personal experiences such as pleasure and pain.

quantum physics—the discipline that explores the behaviour of the smallest particles of material reality.

## R

rabbi—a Jewish teacher.

radical transcendence—the assumption of something beyond the immanent reality we experience that is assumed to underlie this reality and determines its meaning and purpose.

rationalism (rational)—an approach based on the assumed reliability of human reason.

real—in this book ‘real’ refers to something that exists or happens and can be generally experienced, as opposed to ‘true’ which refers to the quality of what something ought to be.

real God—a concept of God based on the manifestation of God’s creative action in the real world as explored by the sciences.

real human being—the human being as a historical, biological, spiritual and social creature as seen by the sciences.

realism—a world view that assumes the existence of an objective reality that does not depend on human observation and interpretation.

redemption (redemptive, redeem)—the act of liberating from, or overcoming, an undesirable situation or condition.

reductionism—the approach that tries to explain a phenomenon by analysing its constituent components rather than taking it as an integrated whole.

reference point—the central issue or organising principle of a system of meaning.

referent—the entity, event, or activity to which a concept or metaphor is meant to refer.

regularities—consistent patterns or rules according to which various levels of reality seem to operate, for instance, causality. (See also ‘natural law’.)

reification—‘making real’, that is, attributing objective reality to an abstract concept, idea, or metaphor, e.g. ‘living water’.

relevance (relevant)—making a difference in a concrete situation.

reptile brain—the part of the brain where our basic survival instincts are located.

revelation—the assumed disclosure of God’s intentionality through the mediation of historical personalities or events.

## S

Sanhedrin—the Jewish authority used by the Roman Empire as an instrument of ‘indirect rule’, that is rule through a semi-autonomous ethnic body.

scenario—possible future.

self-consciousness—being aware of one’s identity and place in the context of one’s life world.

sensitivity to initial conditions—the theory that shows why small differences in the determining conditions at the outset of a process can have far-reaching consequences for the further trajectory of the process.

sin—disturbed relationships between us and God, between us and other human beings, and between us and God’s creation as a whole.

somatic system—the nerve system that conveys messages from the sense organs to the brain.

Son of God—title of Ancient Near Eastern king deemed the representative of God.

Source and Destiny—see ‘transcendent Source and Destiny’.

Source of reality—something assumed to make the reality we experience possible.

speculation—the deduction of logical inferences from unproven assumptions.

spirit—the structure and orientation of consciousness.

subatomic physics—the science that deals with the most elementary components of reality.

subconscious—structures and processes located in the brain, of which we are consciously not aware.

super-ego—psychological term for the authority that we sense within us (our conscience) and that judges and guides our behaviour.

superstition—an unfounded fear, false explanation, or belief based on ignorance.

supra-personal—pertaining to a level of emergence that goes beyond the personal level, for instance, social structures and processes.

superstructure—a structure built on top of a lower level as its foundation.

switch—the deliberate change of direction at a particular juncture of a process.

synapsis—the connection between neurons in the brain.

syncretism—commitment to different ultimate authorities or ‘truths’ that seem to contradict each other.

system of meaning—an integrated body of assumptions that provides consistency, purpose and orientation to human consciousness.

## T

theodicy (= justification of God)—the attempt to justify faith in a powerful and loving God in the presence of evil.

- timefulness—a theological theory that assumes that God’s eternity is not characterised by a lack of time but by the fullness of all time, including past, present and future.
- timelessness—an assumed situation not subject to the constant flow of time.
- traditionalism—a pre-modern world view built on assumptions that have been transmitted from generation to generation and that resists new insights.
- trajectory—pathway of a moving object.
- transcendence—any possible sphere that goes beyond the reality humans can observe, explain and predict.
- transcendent (the notion of, the concept of the transcendent)—intuition concerning the nature of something that lies beyond experienced reality.
- transcendent Source and Destiny of reality—the assumed ultimate origin and purpose of the world process as a whole.
- transience—the quality of something that does not last.
- Trinity—the doctrine that the one God, as perceived by the Christian faith, displays three ‘persons’ or ‘ways of being’, namely Creator, Redeemer and Holy Spirit.
- tritheism—faith in three gods.
- true (‘truth’)—in this book refers to reality as it ought to become, in contrast to ‘real’, which refers to what reality has become.
- true God—an appropriate concept of God.
- true human being—an authentic human being.
- turbulence—violent irregular movements, such as the behaviour of water when waves of the ocean crash against the rocks.

## U-Z

- upward causation—the impact of lower levels of emergence on the character and behaviour of higher levels, e.g. when a poisonous chemical interferes with biological processes.
- vision—the desired and imagined outcome of an activity or process.
- volatility—being subject to rapid and unexpected change.
- wave—the movement and transmission of energy in the form of oscillating movements similar to waves in the sea.
- Yahwist Source of the Pentateuch—the assumed oldest of the sources amalgamated by an editor to form the first five books of the Bible.



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